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BOTANICAL REGISTER:

OR,

ORNAMENTAL FLOWER-GARDEN

AND SHRUBBERY:

CONSISTING OF

COLOURED FIGURES OF PLANTS AND SHRUBS,

CULTIVATED IN BRITISH GARDENS;

ACCOMPANIED BY THEIR

History, Best Method of Treatment in Cultivation, Propagation,

CONTINUED

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PROFESSOR OF BOTANY IN THE UNIVERSITY OF LONDON,

&c. &c. &c.

VOL. XVI.

——viret semper——nec fronde caducâ
Carpitur.

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M.DCCC.XXX.


M. Hazell del.
Pub. by J. Ridgway 169 Piccadilly 1st Jan. 1830
J. Walker sc.

MALVA Munroána.*

Mr. Munro's Mallow.

MONADELPHIA *POLYANDRIA.*

Nat. ord. MALVACEÆ.
MALVA. — *Suprà, vol.* 4. *fol.* 295.

Sect. *Malvastrum.* Carpella 1-locularia, monosperma.
§ 7. Multifloræ, *floribus purpurascentibus v. albis, pedunculis axillaribus multifloris, involucello* 3-*phyllo, foliis angulatis.*
M. *Munroa*na; herbacea albido-tomentosa, foliis subrotundis cordatis subquinquelobis dentatis, involucello setaceo, pedunculis terminalibus paniculatis.
M. Munroa*na. Douglas in herb. Hort. Soc.*
Undique albo-tomentosa. Caulis *ascendens,* 1½-2-*pedalis, teres.* Folia *subrotunda, cordata, subquinquelaba, dentata; lobo medio majore.* Flores *paniculati, subsecundi.* Calyx *involucro è foliolis* 3 *setaceis deciduis constante, campanulatus* 5-*fidus.* Corolla *miniata, subglobosa, petalis rotundatis, emarginatis.* Carpella *plurima, capsularia, monosperma, bivalvia, reticulata, in orbem disposita.*

This plant was found by Mr. Douglas abundantly upon the barren plains of the Columbia, in July 1826; and is closely allied to Malva miniata of Cavanilles.

In our Gardens it does not possess any very striking beauty; but this is probably owing to a want of the right mode of managing it; for Mr. Douglas speaks of it as one of the most beautiful of the plants he collected; and it appears from his dried specimens that it really is a far more showy plant when wild than when cultivated. It suffers much in beauty from rain, which discharges the rich vermilion of the petals, and gives the flowers a dirty red

* Said to be a Latin alteration of the Greek μαλάχη, signifying soft. The emollient properties of the Mallow tribe are well known.

appearance. We have hitherto seen it cultivated in a rich border, or in peat earth; in such situations it does not thrive; it would perhaps be better in a coarse gravelly soil, among shaded rockwork.

A hardy perennial, flowering from May to October. Our drawing was made in the Garden of the Horticultural Society.

Mr. Douglas named the species in compliment to Mr. Munro, the Gardener to the Horticultural Society.

It does not ripen seeds, but is easily increased by cuttings; if allowed to form a single bush, its ascending branches root at the base, and increase plentifully.

Covered all over with whitish down. *Stem* ascending, from a foot and a half to 2 feet high, taper. *Leaves* roundish, cordate, somewhat 5-lobed, toothed; the middle lobe larger than the rest. *Flowers* panicled, arranged rather on one side. *Calyx* campanulate, 5-cleft, with an involucrum consisting of 3 setaceous, deciduous leaflets. *Corolla* vermilion-coloured, roundish, with rounded, emarginate petals. *Carpella* very numerous, capsular, one-seeded, 2-valved, reticulated, arranged in a circle.

J. L.



J. Watts sc.

CLERODĔNDRON* hastátum.

Halberd-leaved Clerodendron.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. VERBENACEÆ.
CLERODENDRON. — *Suprà, vol. 5. fol.* 406.

C. *hastatum*; foliis oppositis subhastato-cordatis 5-lobis acuminatis ramis pedunculisque villosis, paniculâ decussatâ dichotomè ramosâ, calyce foliaceo acuto, tubo corollæ longissimo filiformi. *Wallich MSS.*
C. hastatum (*sphalmate* C. sagittatum). *Wall. cat. herb. ind. num.* 1786.
Siphonanthus hastata. *Rox. hort. beng. p.* 46.

Frutex 4-*pedalis, ramosa, erecta.* Rami *oppositi, patentissimi, subdivaricati, obtusè* 4-*angulares, pedunculi foliaque utrinque pilis mollibus, copiosis, dilutè ferrugineis villosi; ætate glabriores, grisei.* Folia *opposita, patentissima, latissimè ovato-cordata, subhastata,* 3-*nervia, præcipuè subtùs villosa,* 5-*loba, lobis ovatis, acuminatis, integerrimis, intermedio maximo, lateralibus brevibus, infimo utrinque divaricato, nunc obtusato; inferiora palmaria et ultrà, longissimè petiolata, glabriora; superiora breviùs petiolata, sæpè trilobo-hastata, floralia integra, subovata, vel cordata.* Petioli *pilosi, suprà plano-sulcati, utrinque parùm intumescentes; inferiores* 8-10-*pollicares, quin pedales folioque longiores; superiores iisdem breviores.* Panicula *ampla, ovata, terminalis, decussato-patens, villosa.* Pedunculi *oppositi, subcompressi; ramificationes parùm elongati, dichotomi, cum pedicello in bifurcatione.* Bracteæ *foliaceæ, lanceolatæ, ciliatæ, et villosæ, pollicares, deciduæ, quandoque fasciculatæ.* Flores *albi, odorati, villosi, longissimi.* Calyx *magnus, purpurascens, nunc flavescens, persistens, fructûs parùm auctus, profundè* 5-*lobus, lobis unguicularibus, lanceolatis, acutis, dorso concavis, marginibus subrevolutis, undulatis, duobus superioribus paullò majoribus.* Tubus corollæ *longissimus, gracilis, subfiliformis, calyce multoties longior,* 5-*pollicaris, demùm ferè rectus.* Limbus *subæqualiter* 5-*fidus, intùs glaber, laciniis oblongis, vix acutis, pollicaribus, recurvato-patentibus; æstivatione ovatus, cum apice tubi nutans.* Stamina 4, *didyma, exserta limboque longiora, subparallela, tandem divaricata, lævia.* Filamenta *mox infrà faucem inserta, filiformia, erubescentia.* Antheræ *oblongæ, atropurpureæ, incumbentes.* Ovarium *oblongum, læve, subquadrisulcatum,* 1-*loculare,* 4-*sporum: placentis parietalibus, cruciatim oppositis,*

* From κλῆρος, chance, and δένδρον, a tree; in allusion to the different effects of different species of the genus when used medicinally.

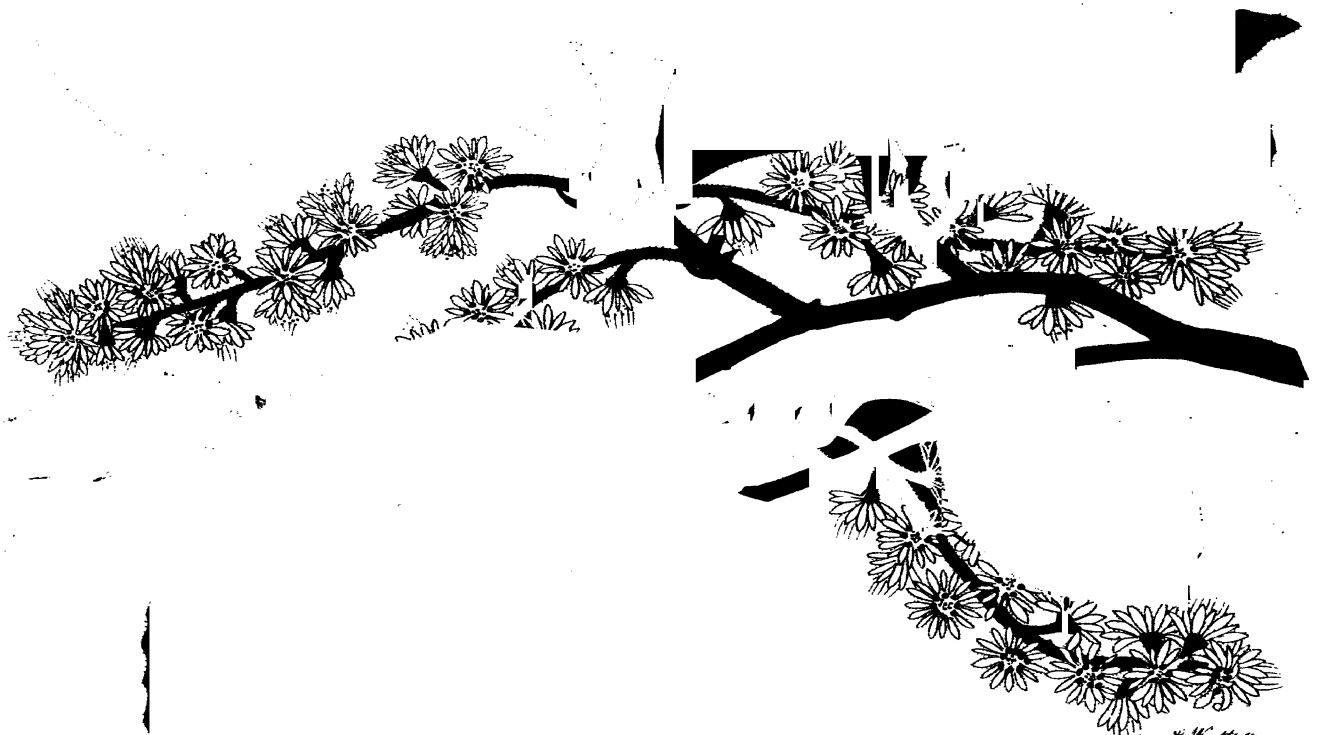
jugiformibus, convexis, ad centrum contiguis, marginibus recurvis, per pares ovulum medio adfigentibus (unde ovarium pseudo-4-loculare). Stylus *capillaceus, sursùm purpurascens.* Stigma *bifidum, lobis acutis, subulatis, divergentibus.* (Bacca *calyce brevior, atropurpurea, nitida, succulenta, 4-loba, lobis* 2 *v.* 3 *abortientibus, fertili obovato.* Semen *solitarium.* Cotyledones *obovatæ, carnosæ.* Radicula *rotundata, infera.* Ex Roxb.)— Wall. MSS.

"This is a very handsome shrub while in flower. It is a native of Silhet, where it was found by the late Mr. M. R. Smith, and by him sent to Dr. Roxburgh in 1811. The Hindustani and Bengali name is *Hathi Khan,* or Elephant's Ear, in allusion to the shape and size of its leaves. It produces its elegant white and fragrant flowers in the hot season, during the months of April and May, and ripens its berries in June and July. In the Botanic Garden of Calcutta it thrives luxuriantly."

For the foregoing ample account of this plant we are indebted to the kindness of Dr. Wallich, by whom seeds were sent to Europe. Our drawing was made from a specimen obligingly communicated by the Honourable and Rev. W. Herbert, in November last.

In the stove it is a rapid-growing plant, easily known by the dark green colour of its halberd-shaped leaves, which have often a deep stain of purple. It increases freely by cuttings.

J. L.



Pub.by J. Murray 1819 Piccadilly Mar 1 1830

BLACKWĒLLIA* Padiflóra.

Bird-Cherry-flowered Blackwellia.

DODECANDRIA *PENTAGYNIA.*

Nat. ord. HOMALINEÆ.

BLACKWELLIA Juss. — *Calyx* tubo turbinato ovario accreto, limbo 5-15-partito, laciniis basi v. medio glanduliferis. *Petala* laciniis calycinis alterna, minora, eglandulosa. *Stamina* è tubo calycis, petalis opposita. *Ovarium* supernè conicum. *Styli* 3-5. *Capsula* 1-locularis, polysperma. *Semina* parietalia. —— *Arbusculæ* Indicæ *aut* Mauritianæ, foliis *ovatis dentatis*, racemis *simplicibus paniculatisve.*

B. *Padiflora*; foliis ovalibus denticulatis glabris, floribus hexandris tetrastylis, racemis erectis foliis brevioribus.

Frutex *erectus, ramosus, ramis teretibus, cinereis, novellis tomentosis.* Folia *plana, ovalia, obtusa, v. acuta, denticulata, glabra, costâ subtùs tomentosâ*; stipulæ *deciduæ.* Racemi *axillares, erecti, folio breviores.* Calyx *turbinatus, pilosus, limbo 6-fido, laciniis ad basin glandulosis.* Petala 6, *ciliata, paulò majora.* Stamina 6, *petalis opposita.* Ovarium *uniloculare, semisuperum, placentis quatuor parietalibus*; styli 4, *glabri, ad basin pilosi.*

A native of China, whence it was sent to the Horticultural Society by John Reeves, Esq. Our drawing was made in the Chiswick Garden last August.

A hardy greenhouse plant, growing well in the open border during the summer; very handsome when in flower, and increasing freely by cuttings. The blossoms in a mass have the appearance of those of the Bird Cherry; examined singly, they resemble nothing so much as an elaborately-finished shuttlecock.

* Named after Mrs. Elizabeth Blackwell, the authoress of a Herbal, containing figures of a few hundred plants drawn and engraved by herself. The work appeared in 1735.

According to the authors of Linnæan classifications, Blackwellia belongs to Dodecandria Pentagynia; but this species is Hexandrous and Tetragynous!

An erect shrub, with taper, ash-coloured branches, the young ones being downy. *Leaves* flat, oval, obtuse, or acute, toothletted, smooth; their rib downy beneath; *stipulæ* deciduous. *Racemes* axillary, erect, shorter than the leaf. *Calyx* turbinate, hairy, with a 6-cleft limb, the segments of which are glandular at the base. *Petals* 6, rather larger. *Stamens* 6, opposite the petals. *Ovarium* 1-celled, half superior, with four parietal placentæ; *styles* 4, smooth, hairy at the base.

J. L.



PENTSTÉMON* venustum.

Pretty Pentstemon.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARINEÆ.
PENTSTEMON. — *Suprà, vol.* 13. *fol.* 1131.

P. *venustum;* caule suffruticoso erecto glabro, foliis sessilibus rectis ovato-lanceolatis acuminatis denticulatis glabris, floribus paniculatis, corollis ventricosis ciliatis, calycibus glaberrimis, antheris pilosis.
P. venustum. *Douglas in herb. Hort. Soc.*
P. diffuso valdè affinis, præcipuè differt caule magis erecto, foliis sessilibus longioribus rectioribus, corollæ colore obscuriore, calycibusque glaberrimis.

Found by Mr. Douglas in the dry channels of rivers among the mountains of North-west America. It increases freely either by seed or cuttings; but is less handsome than P. diffusum or ovatum. To be grown in perfection it should be treated as a biennial: it is apt to become unsightly when old.

Very like P. *diffusum,* from which it is known by its more erect habit, its leaves being sessile, not stalked, and longer and more straight, in the colour of the flower being less lively, and in the calyxes being perfectly smooth.

Flowers in great profusion during the months of July, August, and September.

We may here remark, what it is extremely important to those who are in possession of seed of the rare Pentstemons to know, that this seed cannot be raised in heat; it is indispensable that it should be sown in a cold frame, or all endeavours to raise it will prove fruitless.

J. L.

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* See fol. 1245.



CASSIA* biflora.

Two-flowered Cassia.

DECANDRIA *MONOGYNIA.*

Nat. ord. LEGUMINOSÆ. § *Cassieæ.*
CASSIA. — *Suprà, vol.* 1. *fol.* 83.

Sect. Chamæsenna. *Dec.*

Calycis sepala obtusa. Antheræ oblongæ, biporosæ. Legumina compressa dehiscentia suturis subtumidulis, intùs septis transversis completis aut incompletis multilocularia, loculis non pulposis. Semina verticalia seu valvis parallelè compressa, ovata aut subquadrata, latitudinem leguminis subæquantia, funiculo longiora. *Dec.*

2. Coluteoideæ; *fruticosæ pauci- aut multi-foliolatæ.*

** *Jugiglandulosæ;* glandulis unâ aut pluribus inter foliolorum oppositorum bases.

C. *biflora;* foliolis 6-8-jugis ovali-oblongis obovatisve subglabris, glandulâ subulatâ inter infima, pedunculis folio multò brevioribus 2-4-floris. *Dec. prodr.* 2. 495.

C. biflora. *Linn. amœn. acad.* 5. 397. *Bot. mag. t.* 810.

Rami *densè tomentosi, teretes.* Stipulæ *subulatæ.* Folia 6-9-*juga; petiolo tomentoso, glandulâ subulatâ inter paria* 2 *inferiora; foliolis oblongis obovatisve sursùm majoribus, leviter pilosis.* Pedunculi *axillares, filiformes, biflori, foliis breviores.* Flores *magni, intensè lutei.*

A drawing of this plant was made many years since in the Garden of the Comte de Vandes, under the idea that it was a new species. It is, however, certainly C. biflora, rather more luxuriant than usual.

A native of the West Indies, whence it was long since introduced to our Gardens. In this country it, like most other species of this beautiful genus, has been neglected, in

* According to Olaus Celsius, this word comes from the Hebrew Ketzioth, rendered by κασία in the version of the Septuagint, and Latinised *casia.* But both Virgil and Pliny have a *casia,* which is supposed to have been *D*aphne *C*neorum.

consequence of the necessity of keeping it in a pot in a stove or greenhouse, — a situation in which it does not thrive; but planted in the open ground of a conservatory, or even in the open border, in such countries as the south of France, where the summer temperature is sufficiently high, this and many others become the chief ornaments of a garden.

Flowers in July and August, and strikes readily from cuttings: with us it rarely ripens seeds.

Branches densely downy, taper. *Stipulæ* subulate. *Leaves* of from 6 to 9 pair; the petiole downy; a subulate gland between the base of each of the lower pair; *leaflets* obovate or oblong, largest upwards, slightly hairy. *Peduncles* axillary, filiform, 2-flowered, shorter than the leaves. *Flowers* large, deep yellow.

J. L.



CANNA* Lagunens*is*.

Canna of Laguna.

MONANDRIA *MONOGYNIA.*

Nat. ord. CANNEÆ.
CANNA. — *Suprà, vol.* 7. *fol.* 576.

C. *Lagunensis*; foliis abruptè acuminatis: supremis cordatis inferioribus in basin attenuatis, bracteis maximis oblongis obtusis, floribus luteis limbo interiore tripetalo maculato: petalo altero revoluto integerrimo.

Folia *inferiora* 9 *pollices longa v. majora, utrinque sensim attenuata; suprema cordata, dimidio minora, magis abruptè acuminata.* Bractea *infima spathacea, cucullata, superiores membranaceæ, nunc rotundatæ, transversæ, sæpiùs oblongæ, ovario et calyce multò longiores, omnibus glaucis.* Calyx *glaucus.* Floris *limbi interioris petalum revolutum cæteris intensiùs maculatum.*

We received specimens of this plant from A. B. Lambert, Esq., in September 1829, with the following note:—"The Canna now sent I believe quite new; I have only one plant of it raised from seed from Laguna, in Mexico."

Upon this high authority we publish it, not professing ourselves to understand the limits or peculiarities of the species of this very difficult and intricate genus. It appears to be principally distinguished from other yellow-flowered kinds by the spots upon the inner limb of the corolla, that which is rolled back being entire, by the very broad membranous bracteæ, and by the abruptly acuminate apex of the leaves.

Being a native of Mexico, it will undoubtedly succeed well in a common conservatory or greenhouse, of which it would be a striking ornament.

See fol. 1231.

Lower *leaves* about 9 inches long, or more, tapering gradually to each end; the upper cordate, and not more than half the size. Of the *bracteæ*, the lowest is spathaceous and cucullate, the upper ones membranous, sometimes rounded, and broader than long, more frequently oblong, and much longer than the ovarium and calyx taken together; all of them glaucous. *Calyx* glaucous. The revolute petal more deeply spotted than the rest.

J. L.



*CLEOME** speciosissima.

Shewy Cleome.

HEXANDRIA *MONOGYNIA*.

Nat. ord. CAPPARIDEÆ.
CLEOME. — *Suprà, vol.* 12. *fol.* 960.

C. *speciosissima ;* herbacea inermis, foliis 5-7-foliolatis : foliolis lanceolatis acuminatis pilosis, bracteis ovatis, petalis pedicellorum longitudine.
C. speciosissima. *Deppe in litteris.*
Planta annua, C. roseæ *facie, quâ differt præcipuè foliis pilosis nullis trifoliatis, et floribus majoribus, pedicellis abbreviatis.*

Raised in the Garden of the Horticultural Society from seeds sent by Dr. Deppe from Xalapa. It is a tender annual, requiring exactly the same treatment as Cleome rosea, to which it bears much general resemblance, but from which it differs essentially in the larger size and greater beauty of its flowers.

Well adapted for planting among other border annuals in the summer, when it will ripen its seeds if the season is favourable; for a greenhouse it is less suitable, its leaves having little beauty; but it is always advisable to have a plant or two in reserve under glass to secure seeds, in case those in the open air should fail.

Flowers late in the summer. Our drawing was made in October last; but the plant had been raised only in July, the seeds not having reached England till the end of spring.

J. L.

The derivation of this name is unknown.



CALCEOLÁRIA* Herbertiána.

Mr. W. Herbert's Calceolaria.

DIANDRIA *MONOGYNIA.*

Nat. ord. SCROPHULARINEÆ.
CALCEOLARIA. — *Suprà, vol.* 9. *fol.* 723.

C. *Herbertiana*; caule fruticoso ramoso, foliis oblongis rugosis crenatis pubescentibus utrinque concoloribus, pedunculis terminalibus corymbosis pilosis, corollæ labello cuneato obtuso.

Suffrutex *ramosus, 2-pedalis, pilosus.* Folia *rugosa, obtusè dentata s. crenata, inferioribus ovato-oblongis, obtusis, petiolatis, supremis sessilibus, utrinque concoloribus.* Flores *lutei, corymbosi*; pedunculi *capillares*; calyx *parvus, quadrifidus, pubescens*; corolla *labello inflato, cuncato, obtuso, galeâ parvâ, integrâ.*

A branching shrub, about 2 feet high, almost always in flower, producing two distinct crops of blossoms; the first of which sprouts in the spring, and another in autumn: it will probably prove one of the most ornamental species yet in cultivation.

A native of Chile. Our drawing was made from specimens communicated by the Honourable and Rev. William Herbert, in honour of whom we have taken the liberty of naming it. It is a half-hardy plant, requiring protection from severe frost in winter, but growing in the summer better in the open air than under a glass. Readily increased by cuttings.

J. L.

* See fol. 1214.



DENDRÓBIUM* moniliforme.

Necklace-stemmed Dendrobium.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDEÆ. § *Malaxideæ.* * Dendrobieæ.
DENDROBIUM. — *Suprà, vol. 7. fol.* 548.

Sect. *Caules undique foliosi, versùs apicem sensim incrassati, unde clavati fiunt.* Lindl. Gen. and Sp. of Orchideous Plants, ined.

D. *moniliforme;* caulibus erectis clavatis ramosis: internodiis tumidis, foliis oblongis obliquè emarginatis obtusis, floribus geminatis foliis longioribus, sepalis petalisque oblongis acutis venosis, labello cucullato acuto conformi.

Fu Ran. *Kæmpf. amœn. t.* 865.

Epidendrum moniliforme. *Linn. sp. pl.* 1352.

Dendrobium moniliforme. *Swartz act. Holm.* 1800. *p.* 246. *Willd. no.* 19.

Caulis *erectus, bipedalis, lævigatus, ramosus, internodiis tumidis, pallidè viridibus.* Folia *oblonga, subdisticha, apice obliquè biloba, basibus amplexicaulibus, brevibus, membranaceis.* Flores *gemini, pedunculo communi insidentes, è caule versùs apicem erumpentes, dilutè rosei, venis rubris picti.* Bracteæ *oblongæ, obtusæ, membranaceæ, leviter pilosæ.* Labellum *maculis duabus luteis in fauce.*

A native of China and Japan, from the former of which countries it was introduced several years since by the Horticultural Society.

The figure now given was obtained from a specimen that flowered in the collection of William Cattley, Esq., at Barnet, in November last. By this gentleman it has been cultivated with great success, his plants having attained the height of two feet, and being in a state of the most vigorous health. In general it is unhealthy, grows slowly, and never flowers. It is particularly dis-

tinguished by the tumid joints of the erect stem, of which the contractions become when old so considerable, that the stem acquires something the appearance of a necklace.

Thunberg describes, in his *Flora Japonica* (p. 30), an Epidendrum monile, to which he refers the Fu Ran of Kæmpfer; but he adds, that the leaves are acute, and the flowers white, which renders it probable that he intended some other species. Kæmpfer tells us, that it is suspended by the Japanese in baskets before the doors of their houses, in consequence of some vulgar superstition, the nature of which, however, he did not ascertain.

Stem erect, 2 feet high, polished, branched, with pale-green, tumid joints. *Leaves* oblong, somewhat distichous, obliquely 2-lobed at the apex, with short, membranous, stem-clasping bases (petioles). *Flowers* in pairs, seated on a common peduncle, proceeding from the stem towards its apex, pale rose-coloured, marked with red veins. *Bracteæ* oblong, obtuse, membranous, slightly hairy. *Labellum* with two yellow spots in the throat.

J. L.



DENDRÓBIUM* longicórnu.

Long-horned Dendrobium.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDEÆ. § *Malaxideæ.* * Dendrobieæ.
DENDROBIUM. — *Suprà, vol.* 7. *fol.* 548.

Sect. *Caules undique foliosi, cylindracei, sæpè penduli.* Lind. Gen. et Sp. of Orchideous Plants, ined.

D. *longicornu;* caulibus erectis hispidis flexuosis, foliis ovato-lanceolatis apice valdè obliquis, floribus fasciculatis v. solitariis terminalibus, bracteis ovatis acuminatis hispidis pedicello multò brevioribus, sepalis lateralibus in calcare longo acuminato connatis, petalis sepalo supremo conformibus, labello infundibulari cucullato integro dentato basi cum pede columnæ accreto.

Dendrobium longicornu. *Lindl. in Wallich cat. no.* 1997.

Arborum parasiticum, sæpiùs dependens. Radix *constans fibris cylindricis copiosis, carnosis, fasciculatis.* Caules *plures, graciles, sulcati, flexuosi, semipedales seu pedales, quin bipedales, pilis paleiformibus copiosis, atris, subdecumbentibus, solubilibus conspersus, ætate glabriores.* Folia *alterna, bifariè patentia, interstitiis triplò longiora, lineari-lanceolata, extrorsùm attenuata, apice valdè obliquè bidentata, dentibus angustis, obtusis, altero abbreviato; basi acutiuscula, sessilia, brevissimè vaginantia;* 3-4-*pollicaria, glabra, obsoletè* 3-*nervia, lineata, planiuscula.* Flores *magni, alvi, bipollicares, inodori, glabri, pauci, terminales, nunc laterales in caulibus aphyllis, suffulti pedunculo carnoso, cylindrico, paleaceo-pilosulo, cum ovario oblongo-clavato pollices duos emetientibus.* Bracteæ *duæ, lanceolatæ, acutæ, carinatæ, pilosulæ,* ½-*unguiculares ad basin pedunculi.* Sepala *erecto-patentia, lanceolata, acuta, subcarinata;* superius *levissimè fornicatum;* lateralia *columnæ adnata, deorsùm valdè dilatata, cumque basi columnæ producta in calcar longum infundibuliforme, attenuatum, apice teres, ovarium æquans.* Petala *sepalis subconformia, infra superius subconniventia.* Labellum *magnum, infundibuliforme, rectum, laminâ brevi, ovatâ, obtusâ, subretusâ, ciliato-fimbriatâ; marginibus obtusis, conniventibus; disco papilloso-glanduloso, lineisque parallelis flavis ornato; basi valdè attenuatâ, desinens in calcar floris.* Columna *columnaris crassa, anticè plana; infernè*

See fol. 1239.

sepala lateralia adfigens; parte superiore brevi libera, apice cavâ lateraliter obtusè bilobatâ. Anthera *opercularis, conica, obtusa, ope fili brevissimi postice adfixa, decidua, bilocularis.* Pollen *pulvereum, flavum, inclusum membranulâ subtilissimâ, divisâ in massas duas oblongas, sulco longitudinali notatas, facilè bipartibiles.*—Wallich MSS.

For the foregoing valuable description of this rare plant we are obliged to our friend Dr. Wallich, by whom it was brought from India in 1828, and deposited in the Garden of the Horticultural Society, by permission of the Honourable Court of Directors of the East India Company.

Dr. Wallich adds: "This fine species is a native of most of the mountains in Nipal, where it blossoms during the rainy season. I have also received it from the late Mr. Smith, whose people found it on the mountains bordering on the district of Sylhet. It thrives well at the Honourable Company's Botanic Garden at Calçutta, into which it has been introduced from these countries."

Our drawing was made in the Garden of the Horticultural Society in May last. It grows pretty well in decayed vegetable mould, among moss, in the stove.

An *epiphyte*, usually hanging down. *Root* formed of many cylindrical, fleshy, fasciculated fibres. *Stems* numerous, slender, furrowed, flexuose, 6 inches, a foot, or even two feet long, covered with copious, chaff-like, dark, decumbent, separable hairs, but becoming nearly smooth when old. *Leaves* alternate, spreading bifariously, thrice as long as the intervals, linear-lanceolate, tapering outwards, very obliquely 2-toothed at the apex; the teeth narrow, obtuse, unequal; at the base rather acute, sessile, with very short sheaths, 3 or 4 inches long, smooth, obsoletely 3-nerved, striated, nearly flat. *Flowers* large, white, 2 inches long, scentless, smooth, terminal, or sometimes lateral, on leafless stems, placed on a fleshy, cylindrical, hairy peduncle, measuring, with the oblong clavate ovarium, about 2 inches. *Bracteæ* 2, lanceolate, acute, keeled, rather hairy, half a nail long, at the base of the peduncle. *Sepals* erect, spreading, lanceolate, acute, somewhat keeled; the lateral ones adnate to the column, very much dilated downwards, and, together with

the elongated base of the column, produced into a long, funnel-shaped spur. *Petals* shaped like the sepals, somewhat conniving under the upper one. *Labellum* large, funnel-shaped, straight, with a short, ovate, blunt lamina, fringed, with a papillose glandular disk, and a few yellow lines on it.

This belongs to Dr. Blume's genus Pedilonum.

J. L.

BANKSIA* undulàta.

Waved-leaved Banksia.

TETRANDRIA *MONOGYNIA*.

Nat. ord. PROTEACEÆ.
BANKSIA. — *Suprà, vol.* 8. *fol.* 688.

B. *undulata*; foliis cuneato-oblongis obtusis dentatis undulatis subtùs reticulatis glabriusculis, stigmate cylindraceo sulcato, caule arboreo.

Rami *cinerei, tomentosi.* Folia 4-5-*uncias longa, cuneata, obtusa, vix truncata, in petiolo sensim attenuata, grossè serrata, undulata, subtùs viridia, reticulata, glabra, costâ tomentosâ.* Amenta *oblonga, obtusa*; bracteæ *tomentosæ.* Calyx *fulvo-sericeus, stylo multò brevior.* Stylus *rectus, ascendens, nunquam recurvatus.* Stigma *oblongum, sulcatum, glabrum.*

Whether this is any thing more than a variety of Banksia serrata, we cannot undertake to decide. It is certainly not the same as the plant cultivated in our Gardens under that name, differing in the shortness of its leaves, and their very undulated surface. Mr. Campbell, Gardener to the Comte de Vandes, in whose collection it exists, finds it permanently distinct both from B. serrata and æmula.

It is a fine greenhouse plant, attaining a height of 9 or 10 feet, and flowering in September and October.

Branches ash-coloured, downy. *Leaves* 4 or 5 inches long, cuneate, obtuse, scarcely truncate, tapering by degrees into the petiole, coarsely serrated, wavy, green beneath,

* Named in compliment to the Right Hon. Sir Joseph Banks, late President of the Royal Society,—a gentleman who will ever be remembered with gratitude, as the kindest friend, the firmest supporter, the most powerful protector, that has yet been recorded in the history of science.

reticulated, smooth, with a downy midrib. *Heads* of flowers oblong, obtuse; *bracteæ* downy. *Calyx* fulvous, silky, much shorter than the style. *Style* straight, ascending, never curved backwards. *Stigma* oblong, furrowed, smooth.

J. L.



*ACACIA** albida.

Whitish-leaved Acacia.

POLYGAMIA *MONŒCIA.*

Nat. ord. LEGUMINOSÆ. § *Mimoseæ.*
ACACIA. — *Suprà, vol.* 2. *fol.* 98.

Sect. IV. *Foliis bipinnatis, floribus in capitula globosa collectis.*
§ 1. Aculeatæ.

* *Aculeis omnibus stipularibus rectis, leguminibus inermibus, staminibus* 20 *et ultrà.* Dec. prodr. 2. 460.

A. *albida;* spinis geminis abbreviatis, ramis petiolis pedunculisque pubescentibus, pinnis 6-7-jugis, foliolis 8-10-jugis linearibus acutis, capitulis pedunculatis geminis axillaribus.

Our drawing of this plant was made some years since in the Garden of the Horticultural Society, where it had been raised from Peruvian seeds. The specimen from which it was taken having been lost, we can give no description of it, except such as might be drawn up from the figure itself. Of this practice, which sometimes occurs, we so entirely disapprove, that we prefer to leave the history of the species openly incomplete.

It is a hardy greenhouse plant, very pretty when in blossom; it bears its heads of bright yellow flowers abundantly in October.

* The ἀκακία of Dioscorides (1. 133) appears to have been our Acacia vera; but he had another plant which he called by the same name, a native of Cappadocia and Pontus, which is believed to have been Spartium spinosum. Some of the writers of the fifteenth and sixteenth centuries fancied the sloe, Prunus spinosa, to have been the Acacia of the ancients. The derivation of the name is not well made out: if we are to credit De Théis, its root is to be traced in the Celtic *ac*, which signifies a point; and in that case the name has been invented in allusion to the spines of the plant.

The species is very near A. hebeclada of Decandolle, from which it differs in having a larger number of couples of leaves, and no hispidity on its branches, petioles, or peduncles.

J. L.

PENTSTÉMON* deŭstum.

Parched Pentstemon.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. S
PENTSTEMON. — *Suprà, vol.* 13. *fol.* 1121.

P. *deustum;* caule subsimplici ascendente glabro, foliis inciso-serratis: radicalibus ovato-oblongis, proximis spatulatis, caulinis oblongis acutis sessilibus, supremis subintegris, calycibus glabris, limbi plani laciniis retusis supremis minoribus.

P. deustum. *Douglas in herb. Hort. Soc.*

Caulis *ascendens, pedalis, v. sesquipedalis, glaber.* Folia *glabra, radicalia, longè petiolata, ovata, inferiora spatulata, obtusa; caulina oblonga, sessilia, subamplexicaulia, omnia grossè et inæqualiter inciso-serrata.* Flores *arctè paniculati, ochroleuci, minores, calycibus corollisque glabris.*

Native of North-west America, where it was found by Mr. Douglas on scorched, rocky plains, in the interior.

Our drawing was made in the Garden of the Horticultural Society in September 1829.

A hardy perennial, increased readily by division, and growing well in any common garden soil: it is very near P. confertum and attenuatum, from both of which it differs in its coarsely jagged leaves; which, however, exhibit that character more in the wild specimens than in the cultivated plant.

Stem ascending, a foot or a foot and a half high, smooth. *Leaves* smooth, the radical ones on long stalks, ovate, the

See fol. 1245.

lower spatulate, obtuse; the cauline oblong, sessile, somewhat stem-clasping, all of them coarsely and unequally cut-serrated. *Flowers* in compact panicles, pale yellow, below the usual size; the calyxes and corollas smooth.

J. L.



GREVILLÉA* punícea.

Scarlet Grevillea.

TETRANDRIA *MONOGYNIA*.

Nat. ord. PROTEACEÆ.
GREVILLEA. — *Suprà, vol.* 6. *fol.* 443.

G. *punicea*; foliis elliptico-oblongis basi subattenuatis marginibus refractis, ramulis floriferis racemoque abbreviato recurvis, barbâ interiore perianthii oblongâ dimidium inferius unguium æquante, pistillis uncialibus. *R. Brown prodr.* 1. 232. *ed. Germ.*
Embothrium sericeum β. *Smith New Holl.* 25, *t.* 9. *f.* 5. β.
Lyssanthe speciosa. *Knight et Salisb. prot. p.* 118?
Grevillea punicea. *Brown in Linn. trans. vol.* 10. *p.* 169.
Frutex *ramosus, ramulis angulatis, pilosis.* Folia *lanceolata, mucronata, marginibus recurvis, subtùs sericea.* Flores *punicei, extùs pubescentes*; calyce *barbâ longâ albâ intùs vestito.* Pistilla *glabra.*

This beautiful species is very nearly related to G. sericea, with which it was confounded by Sir James Smith; but from which it differs in the greater length of the pistillum, and the much longer beard which clothes the inside of each division of the calyx. We scarcely know a more desirable greenhouse plant.

Our drawing was made from a specimen obligingly communicated by Mr. Mackay, of Clapton, in June 1829.

Mr. Brown characterises it by the want of a mucro to the leaves; a circumstance in which it would, therefore, differ from G. sericea; but we do not find any variation in this particular between the two plants.

A branching *shrub*, with angular, hairy twigs. *Leaves* lanceolate, mucronate, recurved at the edges, silky beneath. *Flowers* deep purple, downy outside; the calyx clothed internally with a long white beard. *Pistillum* smooth.

J. L.



CA̋PPARIS* acuminàta.

Taper-pointed Caper.

POLYANDRIA *MONOGYNIA.*

Nat. ord. CAPPARIDEÆ.

Trib. II. *Capparеæ.* Fructus subcarnosus indehiscens.——Frutices aut arbores. *Decand. prodr.* 1. 242.

CAPPARIS Linn.—*Calyx* 4-partitus. *Petala* quatuor. *Torus* parvus. *Thecaphorum* gracile. *Stamina* 00. *Siliqua* subbaccata, stipitata.—— Frutices foliis simplicibus, integris. *Dec. l. c.*

Sect. 1. Eucapparis.——Alabastrum globosum, sepalis ovatis concavis obtusis imbricatis inæqualibus. Thecaphorum longum. Species omnes Veteris Orbis aut Novæ Hollandiæ nec Americæ incolæ. *Dec.*

* *Pedicellis axillaribus solitariis, aut rariùs* 2-3 *ex eodem puncto ortis, floribus polyandris.*

C. *acuminata;* inermis, foliis ovato-lanceolatis acuminatis glaberrimis, pedicellis unifloris solitariis petiolis paulò longioribus.

Caulis *fruticosus, in ollâ* 3-*pedalis, ramis subflexuosis, glabris.* Folia *petiolata, ovato-lanceolata, acuminata, utrinque glaberrima.* Flores *axillares, solitarii, pedunculo petiolo paulò longiore.* Sepala 4, *ovata, ciliata.* Petala *totidem, parva, obovata.* Stamina *longissima, inæqualia.*

This beautiful species of Caper was sent from China by John Reeves, Esq. to the Horticultural Society, in whose Garden it blossomed in September 1828. It is a tender greenhouse shrub, with neat foliage, and handsome scentless flowers, which are not, however, so beautiful as those of the common Caper plant, which is one of the most striking objects we have in cultivation.

If this be compared with Cleome speciosissima, figured at fol. 1312, the student of natural affinities, or the mere

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* Said by Forskahl to take its origin from its Arabic name *kabar*, adopted into the Greek and Latin languages.

casual observer, will have no difficulty in recognising their obvious relationship, especially if the details of fructification be carefully considered; but if either of those plants be compared with the Mignonette, it will not be found so easy to reconcile the habit and structure of that plant with such as this; and a tyro would be tempted to lay aside the study of a natural system, in which such combinations are admitted, as something unintelligible and delusive. We should not only not wonder at such an effect being produced, but should partake in the opinion ourselves. To us it seems, that if the principles upon which a natural system of Botany is founded, are such as to render it necessary to combine Reseda and Capparis, those principles must require reconsideration; but we think the combination alluded to, for which several eminent Botanists contend, is not reconcilable with even the present state of our knowledge of vegetable comparative anatomy.

Stem shrubby, growing about 3 feet high in a pot, with somewhat flexuose, smooth branches. *Leaves* stalked, ovate-lanceolate, acuminate, smooth on each side. *Flowers* white, axillary, solitary, their peduncle rather longer than the petiole. *Sepals* 4, ovate, ciliated. *Petals* the same number, small, obovate. *Stamens* very long, unequal.

J. L.



PACHYPÓDIUM*. tuberósum.

Tuberous Pachypodium.

PENTANDRIA *DIGYNIA.*

Nat. ord. APOCYNEÆ.

PACHYPODIUM.—Corolla hypocrateriformis, fauce tuboque esquatis; laciniis limbi 5-partiti æquilateris. *Stamina* inclusa, medio tubo èrta; *antheræ* sagittatæ, subsessiles. *Ovaria* duo; *styli* 2. *Squamæ* hypogynæ nullæ. *Folliculi* ovati. —— Frutices *carnosi*, spinis *infrapetiolaribus bilobis trilobisve.* Folia *sparsa.* Flores *axillares v. terminales.*

P. *tuberosum;* caule basi tuberosâ, spinis rectis subulatis, foliis oblongis subtùs tomentosis.

? Echites succulenta. *Thunberg. prodr. p.* 37. *ib. nov. act. Petrop. v.* 14. *p.* 505. *t.* 9. *f.* 2. *Willd. sp. pl.* 1. 1241. *Römer et Schultes,* 4. 392. *Spreng. syst.* 1. 631.

Caulis *basi sphæricus, tuberosus, lævis, ramis teretibus, succulentis, divisis, spinosis: spinis infra folia provenientibus, bi-trilobis, subulatis, planis.* Folia *sparsa, sessilia, oblonga, obtusa, carnosa, subtùs tomentosa.* Calyx *inferus, 5-phyllus, foliolis ovatis, acutis, pilosis, imbricatis.* Corolla *hypocrateriformis, extùs pilosa, tubo medio ventricoso, intùs infra antheras piloso; limbo contorto: laciniis æquilateris, oblongis, obtusis, subunguiculatis: fauce nudâ.* Stamina *medio tubo inserta;* antheræ *sessiles, sagittatæ, longitudinaliter dehiscentes.* Ovarium *didymum, polyspermum.* Styli *duo.* Squamæ *hypogynæ nullæ.*

When Mr. Brown remodelled the order of Apocyneæ in 1809, he pointed out the Echites succulenta and bispinosa, two remarkable Cape plants, which he had had no opportunity of examining, as likely to constitute a distinct genus. In this opinion, the plant now figured shews that he was right. It evidently differs from Echites, in the segments of the corolla being equal-sided, and in the want of hypo-

* From παχὺς, thick, and πους ποδὸς, a foot; in allusion to its succulent stem and swollen root.

gynous scales; and is more nearly allied to Holarrhena, which differs in having its stamens arising from the bottom of the corolla instead of the middle, regularly opposite leaves, and whole habit.

This plant offers an exception to the usual position of the leaves in Apocyneæ; they are not opposite, as in the order generally, but scattered irregularly over the surface of the stem; a circumstance which appears to be owing to the unusually succulent and distended state of the stem.

A native of barren, sandy plains, at the Cape of Good Hope. If it is the Echites succulenta, it was found by Mr. Burchell in the Kloof and its mountains; but upon this point there is some doubt. It agrees with neither the figure nor description of Thunberg, in minor details; but it has so much general resemblance, that it is very probable they are the same,—allowance being made for Thunberg's loose mode of description.

Our drawing was made at Mr. Tate's Nursery, in August 1828.

Stem spherical at the base, tuberous, smooth; branches taper, succulent, divided, spiny. *Spines* proceeding from below the leaves, 2- or 3-lobed, subulate, flat. *Leaves* scattered, sessile, oblong, obtuse, fleshy, downy beneath. *Calyx* inferior, 5-leaved; leaflets ovate, acute, hairy, imbricated. *Corolla* hypocrateriform, hairy on the outside; the tube inflated in the middle, hairy inside below the stamens; limb contorted; segments equal-sided, oblong, obtuse, slightly unguiculate; throat naked. *Stamens* inserted in the middle of the tube; *anthers* sessile, sagittate, opening lengthwise. *Ovarium* double, many-seeded. *Styles* 2. *Hypogynous scales* none.

J. L.

CĀSSIA* austrālis.

New Holland Cassia.

DECANDRIA *MONOGYNIA.*

Nat. ord. LEGUMINOSÆ. § *Cassieæ.*
CASSIA. —*Suprà, vol.* 1. *fol.* 83.

Sect. CHAMÆSENNA.

Calycis sepala obtusa. Antheræ oblongæ biporosæ. Legumina compressa dehiscentia suturis subtumidulis, intùs septis transversis completis aut incompletis multilocularia, loculis non pulposis. Semina verticalia, seu valvis parallelè compressa, ovata, aut subquadrata, latitudinem leguminis subæquantia, funiculo longiora. *Dec. prodr.* 2. 493.

§. Coluteoideæ; *fruticosæ, pauci- aut multifoliolatæ.*

C. *australis;* foliolis 9-10-(12?)-jugis lineari-oblongis glabriusculis obtusis mucronatis, glandulâ subulatâ inter omnia paria, pedunculis tri-quinquefloris foliis brevioribus.

C. australis. *Bot. mag.* 2676.

Caulis *erectus, fruticosus, sulcatus, pubescens.* Folia *pilosiuscula, horizontalia; foliolis* 10-*jugis, lineari-oblongis, mucronatis, petiolo subalato, glandulâ subulatâ inter omnia paria;* stipulæ *subulatæ.* Pedunculi *axillares et terminales, foliis breviores,* 3-5-*flori, floribus approximatis.* Sepala *subpilosa.* Petala *vitellina, subæqualia.*

A native of the banks of the Hastings, in New South Wales, whence seeds are often sent to England. It is one of the handsomest of the genus, and highly deserving of cultivation, as a plant to occupy the open border of a Conservatory.

In their native places, Cassias are often among the most beautiful bushes of the forest, covered with myriads of flowers of the richest yellow, and scarcely inferior in the gracefulness of their foliage to the Mimosa itself; yet in

our Gardens they are generally unsightly and neglected; a circumstance which arises entirely out of our bad or imperfect cultivation. We grow them in a pot, where they are suffered to languish; or, if they attempt to push vigorously, the pruning knife is freely employed to restrain them within such a space as the gardener can afford. They will not bear pruning; they require plenty of space to grow, and encouragement rather than restraint. If a more liberal and judicious management were adopted, many species, particularly this, would amply repay the care of the cultivator.

Our drawing was made some time since from a specimen communicated by A. B. Lambert, Esq. Flowers in May and June. The blossoms are fragrant, with a scent like that of a Heliotrope. According to the *Botanical Magazine*, the pairs of leaves are sometimes 12.

Stem erect, shrubby, furrowed, pubescent. *Leaves* somewhat hairy, horizontal; leaflets in 10 pairs, linear-oblong, mucronate, with a somewhat winged petiole, and a subulate gland between each pair; *stipules* subulate. *Peduncles* axillary and terminal, shorter than the leaves, each with 3 to 5 flowers, placed close together. *Sepals* somewhat pilose. *Petals* deep yellow, nearly equal.

J. L.



CONVŌLVULUS* farinósus.

Mealy-stemmed Convolvulus.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CONVOLVULACEÆ.
CONVOLVULUS. — *Suprà, vol.* 3. *fol.* 222.

C. *farinosus*; foliis cordatis acuminatis repandis, pedunculis trifloris, caule farinoso. *Römer et Schultes species plant.* 4. 278.
C. farinosus. *Linn. Mantiss.* 2. 203. *Willd. sp. pl.* 1. 846. *Smith prodr. fl. Græc. Sibth.* 1. 133. *Jacq. hort. vind.* 1. 135.
C. *farinosus*; foliis subsagittatis oblongis acuminatis repandis suprà rugosis subtùs venosis, pedunculis folio longioribus, calycibus conniventibus, caule farinoso. *Spreng. syst.* 1. 598.
Caules *debiles, volubiles, tomentosi.* Folia *tomentosa, petiolata, cordata, v. hastata, v. sagittatâ, acuminata, leviter repanda.* Pedunculi *sæpiùs trifiori, foliis nunc longiores, nunc breviores.* Bracteæ *subulatæ.* Sepala *glabra, ovata, mucronata.* Corolla *in genere minima, limbo acutè pentagono.* Stigmata 2, *filiformia.*

Our drawing of this neat little perennial was made some years ago in Mr. Colvill's Nursery. It represents the upper end of a branch, in which the leaves are merely cordate; but towards the root they become sagittate, or even hastate.

The peduncles vary in length, some being shorter, some longer, than the leaves; the flowers are also either three, or some other number; the former is, however, most common.

A native of Madeira, whence it was introduced to the Kew Garden by Masson, in 1777. Also found by

* So called from *convolvo*, to twine round; in allusion to the most usual habit of the genus.

Dr. Sibthorp in the fields and hedges of Mysia, Livadia, and the Peloponnesus, very common.

A half-hardy plant, growing out of doors in the summer, but requiring protection from frost in winter.

Stems weak, twining, downy. *Leaves* also downy, on long stalks, cordate, or hastate, or sagittate, acuminate, slightly repand. *Peduncles* usually 3-flowered, sometimes longer, sometimes shorter, than the leaves. *Bracteæ* subulate. *Sepals* smooth, ovate, mucronate. *Corolla* very small for the genus, with an acutely pentagonal limb. *Stigmas* 2, filiform.

J. L.

NOTE.

Mr. Don has obligingly informed us, that Canna lagunensis, fol. 1311, is certainly C. pallida of *Roscoe's Scitamineous Plants*, t. 19. We regret exceedingly that we have no ready means of access to this costly work, which we believe requires to be collated with the *Botanical Register* in several other articles. The species having been kindly communicated to us as new by Mr. Lambert, it is to be considered as having been published under the high authority of that gentleman rather than our own.



*ASTRÁGALUS** succulentus.

Succulent Milk Vetch.

DIADELPHIA *DECANDRIA.*

Nat. ord.
ASTRAGALUS. — Suprà, vol. 2. fol. 176.

1. PURPURASCENTES; *stipulis à petiolo liberis, floribus purpurascentibus.*

§ 3. *Onobrychoidei;* stipulis à petiolo et inter se distinctis, floribus purpurascentibus densè spicatis capitatisve, vexillis linearibus elongatis, leguminibus rectis rariùs falcatis, radicibus perennibus. *Dec. prodr.* 2. 285.

A. *succulentus;* decumbens glabriusculus, foliolis ovalibus obtusis, stipulis triangularibus, spicis confertis pedunculatis folio brevioribus. *Spreng. syst.* 4. *part* 2. *p.* 288.

A. succulentus. *Richardson in Franklin's journey.*

Prostratus, undique leviter pubescens. Folia *ascendentia, foliolis* 10-12-*jugis, oblongis, obtusis;* stipulis *membranaceis, triquetris.* Pedunculi *ascendentes, ad apicem racemosi, multiflori.* Bracteæ *ovatæ, acuminatæ, scariosæ.* Calyx *pedicellatus, tubulosus, 5-dentatus, pilis nigris obsitus.* Flores *purpurascentes.* Vexillum *oblongum.*

Originally found by Dr. Richardson in Arctic America, and published by him in the Supplement to Captain Sir John Franklin's account of his memorable expedition. We are not aware that any seeds were brought home at that time. The plant from which our drawing was made came up from seeds collected by Mr. Douglas in the vicinity of the Sascatchewan River, a stream which rises in the Rocky Mountains, in the country of the Arthabascow Indians, in latitude 53° or 54° north, and, after running

* The ἀστράγαλος of Dioscorides was the Orobus vernus: why a word signifying a vertebral bone of an animal, or a die used for play, was applied to that species, we do not know.

due east, empties itself into the northern end of Lake Winnipeg.

It is an unpretending, hardy, herbaceous plant, growing freely in peat, among other plants, and flowering in June.

Its fruit is not certainly known. We suspect it to be of the same nature as that of Astragalus caryocarpus, figured at fol. 176 of this work; at least there is in Mr. Douglas's collection a fruit of such a kind, which does not appear to belong to any other of his species.

Our drawing was made in the Garden of the Horticultural Society.

Prostrate, with a slight hairiness upon every part. *Leaves* ascending; leaflets in 10 or 12 pairs, oblong, obtuse; *stipules* membranous, triangular. *Peduncles* ascending, racemose at the extremity, many-flowered. *Bracteæ* ovate, acuminate, scarious. *Calyx* pedicellate, tubular, 5-toothed, covered with a few black hairs. *Flowers* purplish. *Vexillum* oblong.

J. L.



LOBÉLIA* purpúrea.

Purple Lobelia.

SYNGENESIA *MONOGAMIA.*

Nat. ord. LOBELIACEÆ.
LOBELIA. — *Suprà, vol.* 1. *fol.* 60.

L. *purpurea;* caule suffruticoso, foliis lanceolatis serrulatis glabris, floribus racemosis, bracteis ovatis integris, calyce sphærico: dentibus ovatis acutis, corollâ altè fissâ 5-partitâ: laciniis parallelis falcatis secundis.

Caulis *suffruticosus, erectus, glaber, indivisus.* Folia *coriacea, lanceolata, serrulata, acuta, utrinque glabra; superiora nunc dilatata, obtusa, apice denticulata, nunc in bracteis subintegris abeuntia.* Flores *in axillis bractearum, racemum terminalem constituentes.* Calyx *subrotundus,* 10-*costatus,* 5-*dentatus, dentibus et pedicellis pubescentibus.* Corolla *amœnè purpurea, unciam longa, hinc altè fissa, laciniis linearibus, apice conniventibus, falcatis, secundis.* Stamina *monadelpha; tubo apice incurvo;* antheræ *connatæ, muticæ.* Capsula *bilocularis, apice bivalvis, polysperma, placentis in medio dissepimenti.* Stigma *bilobum.*

A native of Chile, where it was found in the neighbourhood of Valparaiso by Mr. M'Rae, in February 1825. He sent seeds to the Horticultural Society, in whose Garden our drawing was made in August 1828.

It is a handsome half-shrubby plant, growing in the open border in the summer, but requiring protection in the winter. It does not ripen its seeds, and can only be increased by cuttings, or division of the crown of the root.

Stem half-shrubby, erect, smooth, undivided. *Leaves* coriaceous, lanceolate, serrulate, acute, smooth on each side; the upper ones sometimes dilated, obtuse, with teeth at the end, more frequently passing insensibly into nearly entire bracteæ. *Flowers* axillary, forming a terminal raceme.

Calyx roundish, 10-ribbed, 5-toothed; both the teeth and the pedicel pubescent. *Corolla* bright purple, an inch long, deeply split on one side; *segments* linear, conniving at the apex, falcate, all turned to one side. *Stamens* monadelphous, their tube incurved at the apex; *anthers* connate, destitute of appendages. *Capsule* 2-celled, 2-valved at the apex, many-seeded, with the placentæ in the middle of the dissepiment. *Stigma* 2-lobed.

J. L.



LÍNUM* mexicánum.

Mexican Flax.

PENTANDRIA *PENTAGYNIA.*

Nat. ord. LINEÆ.
LINUM. — *Suprà, vol.* 14. *fol.* 1163.

L. *mexicanum;* glabrum, erectum, supernè paniculato-ramosum; foliis sparsis, ovatis v. ovato-oblongis, acutis, basi rotundatis; sepalis ovatis, acutis, subciliatis; stylis ad medium connatis; stigmatibus globosis; capsulis acuto-mucronatis. *Bentham.*
Linum mexicanum. *Humboldt, Bonpl. et Kunth nova genera et sp. pl.* 6. *p.* 39. *Dec. prodr.* 1. 424.

Our drawing of this rare species of Flax was made in August last, at Mr. Tate's Nursery. It is a very pretty half-hardy perennial, native of woods near Santa Rosa, in Mexico, where it was found by Humboldt and Bonpland. Probably propagated by cuttings.

For the following remarks upon this, and some neighbouring species, we are indebted to Mr. Bentham.

" The coalition of the styles in this, and several other species of yellow Linums, is a character which appears to have been generally overlooked in the distinction of the species. It is very remarkable in the L. *Macræi* (described below), where the style is very long, and only slightly quinquefid at the apex: in the above L. *mexicanum*, and in the L. *africanum* Linn. (L. *monogynum* Forst.), and L. *repens* Hamilt., the styles are connate up to about the middle of their length; and at the base only in the L. *æthiopicum* Thunb. (L. *africanum* Reichb. icon. exot. t. 46, non Linn.), *rigidum* Pursh, *virginianum* Linn., and *mysurense* Heyne. In the L. *gallicum* Linn., *aureum* W. et K., *setaceum* Brot. (L. *bicolor* Schousb.), *luteolum* Bieb., *nodiflorum* Linn., *strictum* Linn., *corymbiferum* Desf., *maritimum* Linn., *glandulosum* Mœnch., *quadrifolium* Linn., *trigynum* Roxb., and *tetragynum* Colebr., the styles are entirely distinct from their base.

* According to De Théis, the Celtic *llin, thread,* is the origin of linseed, λίνον, linum, linen, linnett, and similar words. The use of linum or flax would therefore appear to be of very high antiquity.

In the L. *glandulosum*, *luteolum*, *nodiflorum*, and *corymbiferum*, the stigmates are not globular, as in most of the species of this genus, but elongated, and scarcely thicker than the styles.

I take this opportunity of subjoining the characters of three new species of Linum belonging to Decandolle's first division, *floribus flavis*.

L. *Macræi*, glabrum; caulibus basi fruticosis, ramis erectis; foliis oppositis alternisve, lanceolatis, acuminatis, rigidis; sepalis ovatis, acuminatis; petalis calyce duplò longioribus; stylo corollam subæquante, apice breviter quinquefido; stigmatibus globosis; capsulis acuto-mucronatis.

Flowers of the same size as those of L. *maritimum* or *tenuifolium*. In habit the plant resembles the L. *africanum*, from which it differs chiefly by the shorter leaves less frequently opposite, and by the conformation of the styles. It was gathered at Valparaiso by Mr. M'Rae, collector to the Horticultural Society.

L. *mysurense* (Heyne MSS. ex Wall. cat. herb. ind. no. 1507), glabrum, erectum; foliis alternis, oblongis, obtusis, basi attenuatis; floribus paniculato-corymbosis; sepalis ovatis, acutiusculis, margine subciliatis; petalis calycem breviter superantibus; stylis basi connatis; stigmatibus globosis; capsulâ acuto-mucronatâ.

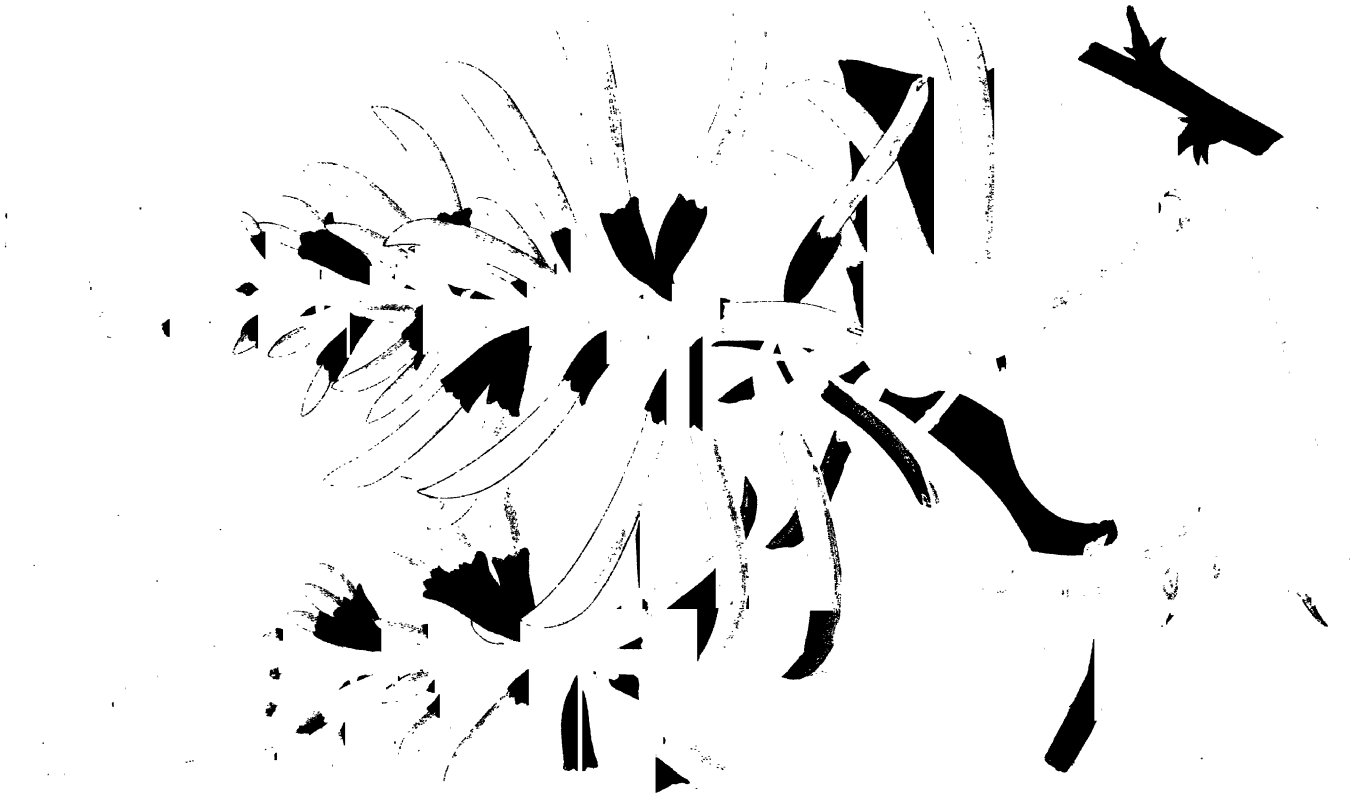
A small annual, resembling in habit and in the size of the flower, the L. *gallicum* or L. *virginianum*, but differing from both by the broader and more obtuse leaves, and by the ovate sepals but slightly acute, not acuminate. The flowers appear to be yellow.—From Dr. Heyne's collection in the East India Company's Herbarium, where it is marked by him with the names of L. *mysurense* and L. *humile*.

L. *tetragynum* (Colebr. MSS. ex Wall. cat. herb. ind. no. 1506), glabrum, fruticosum, ramosum; foliis elliptico-oblongis, acuminatis, serratis, basi attenuatis, petiolatis; floribus capitato-corymbosis; pedunculis bracteatis; sepalis ovatis, breviter acuminatis, margine subciliatis; petalis calyce duplò longioribus; stylis 4, liberis; stigmatibus globosis; capsulis obtusis.

A native of Nipal and Sylhet. (*Wallich.*) Flowers yellow, rather smaller than in the L. *trigynum*. Inflorescence similar to that of the variety of L. *repens*, which appears to have been described by Don as L. *Cicanobum*.

The three East Indian frutescent Linums (L. *trigynum*, *repens*, and *tetragynum*) differ from the others by their frutescent stem, large penni-nerved leaves, and by the capsule obtuse or depressed at the top, and less distinctly divided into separate carpella. They might form a good section, though there do not appear to be characters sufficient to distinguish them as a genus. The L. *repens* has the leaves serrate, and the styles connate to about the middle of their length. It has been figured by Smith (*exot. bot.* t. 15) as L. *trigynum;* and I am disposed to consider the L. *Cicanobum* (Hamilt. in *Don prodr. fl. nep.* p. 217) as a mere variety, or rather a state depending on the age of the plant. The true L. *trigynum* is well figured in the *Bot. mag.* t. 1100. It has the leaves entire, and the styles distinct from the base."

J. L.



ERYTHRÍNA* carnea.

Flesh-coloured Coral Tree.

DIADELPHIA *DECANDRIA*.

Nat. ord. LEGUMINOSÆ.
ERYTHRINA. — *Suprà, vol.* 4. *fol.* 313.

E. *carnea;* caule arboreo subaculeato, petiolis inermibus, foliolis latè ovato-rhombeis acutis glabris, vexillo lineari-oblongato, calyce campanulato truncato. *Dec. prodr.* 2. 411.
E. carnea. *Ait. Hort. Kew.* 3. *p.* 8.
E. americana. *Mill. dict. n.* 2. *Trew. Ehret,* 2. *t.* 8.
β. foliis subtùs puberulis. *Suprà, vol.* 5. *fol.* 389.
Caulis *aculeis brevibus, uncatis.* Folia *ternata, rotundato-ovata, leviter cordata, acuta, utrinque glabra, petiolo subaculeato.* Racemi *coætanei,* 4-6 *uncias longi, erecti, leviter pubescentes.* Calyx *tubulosus, truncatus, crenis* 5 *minoribus.* Corolla *pallidè carnea,* 1½ *unciam longa;* vexillum *lineare, complicatum;* alæ *et* carina *æquales, intrà calycem inclusæ, acutæ.* Ovarium *pubescens.*

The plant which is represented at fol. 389 of this work is not the genuine Erythrina carnea, but a downy-leaved variety, with smaller flowers, and a less prickly stem. For the opportunity of figuring the species, as originally described by Miller, and drawn by Ehret, we are indebted to the Comte de Vandes, in whose hothouse at Bayswater our specimen was produced in March 1827.

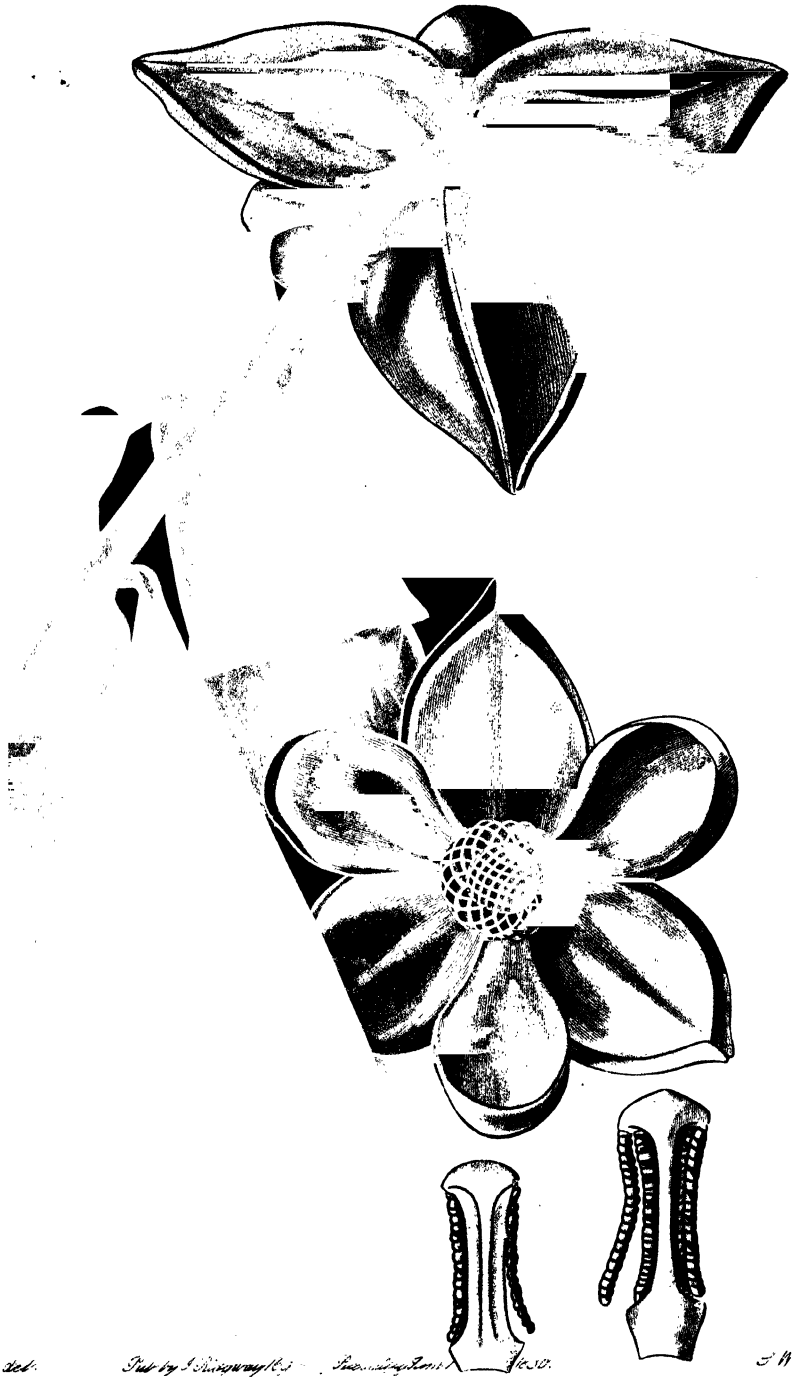
A native of the hottest parts of South America, particularly of Vera Cruz and Santa Martha, whence seeds were originally sent to Miller by Houston. It is rather a handsome plant while in flower, but not particularly worth cultivating at any other time.

Stem furnished with short, hooked prickles. *Leaves*

* See fol. 1246.

ternate, roundish ovate, very slightly cordate at the base, acute, smooth on each side, with a slightly prickly petiole. *Racemes* appearing along with the leaves, from 4 to 6 inches long, erect, very slightly pubescent. *Calyxes* tubular, truncate, with 5 small crenatures. *Corolla* pale flesh-colour, about an inch and a half long; *vexillum* linear; *alæ* and *carina* of equal length, both included within the calyx, acute. *Ovarium* pubescent.

J. L.



*ANÓNA** laurifólia.

Laurel-leaved Custard Apple.

POLYANDRIA *POLYGYNIA.*

Nat. ord. ANONACEÆ.

ANONA Adans. — *Calyx* 3-partitus 3-lobusve, lobis concavis subcordatis acutiusculis. *Petala* 6, crassiuscula, interiora minora aut nulla. *Antheræ* plurimæ subsessiles apice angulatæ dilatatæ torum obtegentes. *Carpella* plurima coalita in baccam unicam sessilem cortice muricato squamoso aut reticulato, intùs pulposam ad ambitum multilocularem, loculis monospermis. —— Arbores *aut* frutices, *cortice sæpè reticulato glanduloso aromatico;* folia *integra interdùm pellucido-punctata;* pedunculi *axillares aut oppositifolii, sæpè solitarii, uni- aut pauciflori, interdùm bracteolati.*— Decand. syst. 1. 466.

A. *laurifolia;* foliis ovato-lanceolatis glabris, pedunculis solitariis unifloris pendulis, petalis exterioribus cordatis acutis, interioribus rotundatis, fructibus mammæformibus lævibus. *Dec. l. c.*

A. fructu lævi viridi pyri inversi formâ. *Catesby carol.* 2. *p.* 67. *t.* 67.

A. glabra, var. *β.* *Lam. dict.* 2. 125.

A. laurifolia. *Dunal monogr. p.* 65. *Dec. prodr.* 1. 84.

Sepala *tria, ovata, acuta, persistentia.* Petala *coriacea, aurantiaca;* tria exteriora $1\frac{1}{2}$ *unciam longa, oblonga, plana, subcordata, æstivatione valvata;* tria interiora *breviora, subrotunda, unguiculata, cucullata, utrinque maculâ pallidâ.* Stamina *indefinita, in torum hypogynum convexum pilosum densè aggregata;* antheræ *adnatæ, extrorsæ, lineares, biloculares, pollinis granulis in utroque loculo serie duplici cohærentibus.* Ovaria *indefinita, densissimè aggregata et agglutinata, villosa, recta, subulata, apice stigma viscidum, carnosum, cylindraceum gerentia, unilocularia;* ovulum *solitarium, erectum.*

A small tree, found wild in St. Domingo, Ilatera, Andros, and other islands of the Caribean Sea; and also upon the continent of America, from the most southern to the most

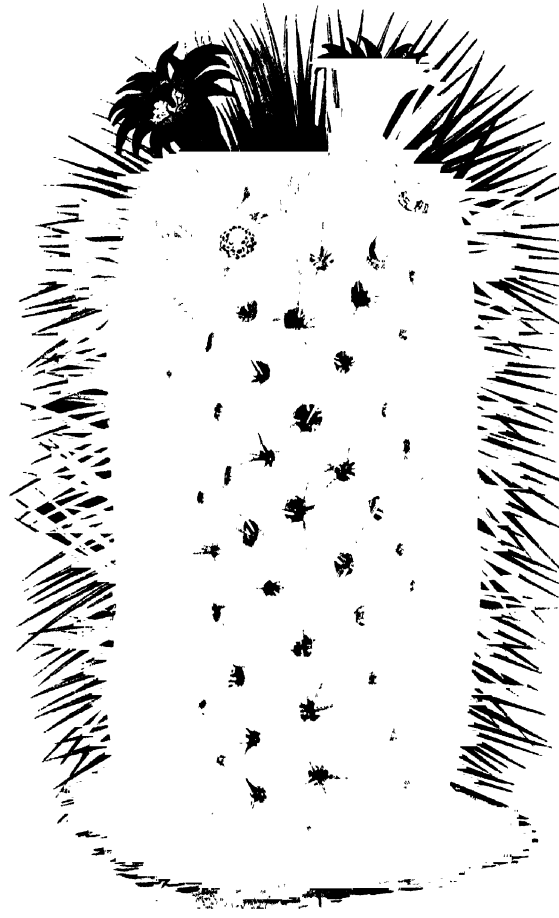
* Apparently a corruption of *menona* or *manoa;* names which some of these plants bear in the Malayan archipelago. The word has no reference to the Latin *annona*, provision.

northern limit of the tropic. Catesby found it in Carolina; and the plant from which this drawing was made was raised from seeds sent to the Horticultural Society by R. Hesketh, Esq., his Majesty's Consul-General at Maranhão.

Flowers in the stove in August. Its blossoms are singular, but not fragrant; the fruit does not seem to be of any value; the foliage is particularly handsome.

The pollen was observed to collect in two rows in each cell of the anther, and so to fall out, as is represented in the small figures at the bottom of the accompanying plate; an unusual economy of the granules, the cause of which, as connected with the general structure of the sexual apparatus, it is difficult to comprehend.

J. L.



MAMMILLARIA* pulchra.

Handsome Mammillaria.

ICOSANDRIA *MONOGYNIA.*

Nat. ord. CACTEÆ *Dec.* Tribus *Opuntiaceæ;* semina parietibus baccæ affixa.

MAMMILLARIA Haworth.—*Cotyledones* nullæ. *Suffrutices* subrotundi v. oblongo-cylindrici, crassi, carnosi, absque axe ligneo; lactescentes (an semper?) aphylli, mammillis spiniferis crebrè creberrimève tecti. *Flores* axillares, inter mammillarum bases.—*Haworth synops. succ.* 177.

M. *pulchra;* oblongo-cylindrica, spinis subsenis supernis majusculis patulis fulvis; subquatuordenis eodem spinario inferioribus minutis horizontalibus niveis. *Haworth MSS.*

Plantæ *nostræ simplices, perennes, virides,* 4-5 *unciales, diametro biunciali, apice lanatâ, depressâ, spinis demùm intertextis undique tectæ.* Mammillæ *numerosæ, ovato-pyramidales, majusculæ seu mediocres, in circiter* 11-13 *ordines concinnè spiraliter contortuplicatæ.* Spinarium (*in hoc genere insuper mammillarum apices*) *tomentosum, sub-*20-*spinigerum.* Spinæ *subsex apicales, patuli, seu subsemihorizontales,* 6-9, *lineares, et sæpiùs aliquantillum recurvulantes; aliæque* (spinulæ) *sub-*14 *setiformes radianter horizontales, vel subrecurvæ, et cæteris multoties minores.* Flores *in hoc genere inter majores rosei, parùm infra plantæ apicem, per mammillarum* axillas *lanato-setuligeras subcumbienter progredientes.—Pone M.* fulvispinam *Haw. in* Phil. Mag. *l. c. cui forsan nimis affinis* (*sed vix*), *certè locarem.*—Haw. MSS.

"This figure represents a remarkable and new species of greenhouse plant, of the most succulent kind, presented, with other Mexican plants, to the Garden of the Horticultural Society at Chiswick, by Sir J. Lubbock, in December 1826. A great many of its affinities are now in our Gardens; and they are so impatient of water in winter, that they succeed best when planted in small pots of light sandy soil, and each plunged into another larger pot, in

* So called from *mamma*, a teat: the whole surface of these plants is covered with projections resembling the teats of an animal.

which only, water should be given once a fortnight in winter, and once or twice a week in summer, as occasion requires. They may be increased by seeds, or by decapitation in summer, in the usual way, taking special care to dry their wounds properly in some shaded place before planting, and lightly watering them to settle the earth at the time.

"M. *pulchra* is a simple, oblong, cylindrical, green plant, with a depressed woolly apex, and almost covered with unequal *spines*, beautifully and intricately arranged in 11-13 symmetrical, very spiral rows. The *mammillæ* are rather large, and ovately pyramidal. The *flowers* are produced, near the summit of the plant, from the woolly axillæ of the *mammillæ*, solitarily, but nearly in a row, are rather large in this genus, and of a rosy colour, opening with us in the month of June.

"It may be added, that about six of the superior spines are fulvous, and on the apex of each mammilla, and many times larger, though less expanded, than the basal niveous ones, which are about fourteen in number, and like very small setæ, elegantly radiating in a nearly horizontal way, or slightly recurving.

"This plant will arrange next M. *fulvispina*, to which it is doubtless very closely allied, but appears both in character and country distinct."—*Haw.*

We are greatly indebted to Mr. Haworth for the determination of this species, which belongs to a tribe so numerous and little known, that it would have been scarcely possible for a Botanist less skilful in the knowledge of succulent plants, to have discovered whether it had been previously described or not.

Mr. Haworth employs the term *spinarium* in his specific character, for the corneous place out of which the spines of Cacti proceed, and into which he finds them fitted, as the teeth of animals are into the socket of the jawbone of animals. A very curious structure.

J. T.



*MIMULUS** propinquus.

Dwarf Yellow Monkey-flower.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARINEÆ.
MIMULUS. — *Suprà, vol.* 11. *fol.* 874.

M. *propinquus;* annuus, undique glanduloso-pubescens, caule decumbente tereti, foliis ovatis dentatis: supremis sessilibus, pedunculis axillaribus foliis brevioribus pubescentibus, corollæ lobis obtusis: fauce pubescente; tubo calyci æquali.

Herba, *habitu M. guttati, sed omnibus partibus, præsertim floribus, minor.* Caules *et* folia *magis carnosa, et undique glanduloso-pubescens.* Pedunculi *pubescentes, foliis breviores.* Calyx *carnosus, leviter pubescens, dentibus duûbus inferioribus rotundatis, supremâ cæteris majore, demùm subfalcatâ.* Corolla *figurâ omninò M. guttati; sed triplò minor, lobis planioribus, et fauce minùs barbatâ.*

Raised in the Garden of the Horticultural Society from seeds brought from North-west America by Mr. Douglas. It is a hardy annual, flowering freely from May to October, and producing seed in great abundance.

Like all its genus, it will always increase by the seeds it naturally scatters upon the soil; so that a Garden in which it has once been planted is scarcely likely to lose it, unless it be destroyed designedly. It is by no means so handsome as M. luteus, rivularis, or guttatus; but it is a pretty addition to the species of this very interesting group.

The stigma of all the genus offers a beautiful example of vegetable irritability. When at rest its two broad lobes lie apart, their margins being separated by a considerable interval; but upon touching the stigma with a bristle, or some such body, the lobes instantly collapse with great rapidity. J. L.

* So called from μιμέω, a monkey; in allusion to the resemblance of the flower to the visage of a grinning monkey. Pliny has a *mimulus;* but it is not known what he meant.



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J. Watts, sc.

CACTUS* (Epiphyllum) *Ackermanni*.

Ackermann's Mexican Cactus.

ICOSANDRIA *MONOGYNIA*.

Nat. ord. CACTEÆ.

CACTUS. — *Suprà, vol.* 2. *fol.* 137.

Subgenus EPIPHYLLUM Hermann.—*Corollæ* tubus longissimus, mediocris, v. brevissimus, sparsim et remotè squamulosus, inermis, è crenis ramulorum ortus, inter perpusillas et innocuas spinulas; limbus (corollæ fugacis) altè multifidus, vel quasi polypetaloideus, rosaceus, aut subindè plus minus elegantissimè ringens.——Suffrutices *Americæ calidioris ramosi, graciles, sed vix scandentes; in scopulos rupesve, vel super arborum truncos;* ramulis *alatim compressissimis, tenuibus sed carnosulis, lobato-crenatis, viridibus, lævibus, axi centrali gracili ligneo.* Flores *solitarii, sæpiùs magni speciosi, albi rosei coccineive, variùs suaveolentes.*—Haworth in Phil. Mag. Aug. 1829.

C. (Epiphyllum) *Ackermanni;* corollâ maximâ obsoletissimè ringente ante florescentiam assurgente, apice acuto; quàm tubus ferè quadruplò longiore. *Haworth l. c.*

Facies *C. phyllanthoidis, at ramorum lobi pauciores, obtusiores, et ferè auriculiformes; et in eorum axillis spinulæ ordinariæ fortè magis conspicuæ.* Flores *solitarii, sed numerosi, et affinium more directione ferè horizontali;* tubo *cum germine plusquam unciali, sordidè viridi, et quasi quinquangulari è decursione squamularum paucarum seu remotarum et calycinarum.* Petala *imbricata, acuminata, nitentia, inferiora longè minora, canaliculatim carinata, apice recurvula; summa quasi biserialia, semi-expansa, lanceolata, coccinea; horum cælum versùs oblonga et lanceolata, cætera terram spectantia oblonga et angustiora.* Genitalia *ut in affinibus, corollâ breviora, declinata, rosea, sed apicem versùs curvatim ascendentia;* stylo *humiliora, stigmatibus circiter septem.*—Haworth l. c.

* Theophrastus has a κάκτος, which is the modern Cynara Cardunculus, Cardoon or Chardon, the petioles of which are used as a delicate vegetable: it had no other resemblance to the modern Cactus than in being prickly. Epiphyllum, which signifies " upon a leaf," is a name given long since, under the idea that the stems of these plants were leaves, and that consequently the flowers grew upon leaves.

This splendid plant is a native of Mexico, whence a part of a stem was brought by Mr. George Ackermann, in compliment to whom the species has been named by Mr. Haworth. The original stem was given to Mr. Tate, in whose Nursery it flowered in June of last year; and at that time our drawing was made. It subsequently produced fruit about the size of a pigeon's egg, of a dull purple colour, and with a smooth shining skin.

Some doubt having been entertained upon the accuracy of Mr. Tate's statement regarding the origin of this species, we think it right to say, that we have examined the plant which is said to have been imported from Mexico, and that we have no doubt whatever that it was really the produce of some foreign climate. We are also authorised to add, that Mr. Haworth, of whose description we have availed ourselves, and by whom the species was named, entirely participates in our opinion, and that he is now acquainted with Mexican individuals in two other collections.

It is, however, very remarkable, that about the same time that Mr. Tate's imported plant blossomed, our artist was summoned by Mr. Mackay to make a drawing of a seedling raised by Mr. Smith, Gardener to Lord Liverpool, at Combe Wood, which proved so similar to this as to give rise to the doubts above adverted to. We understand the flower of this seedling is rather larger, and its colour deeper red than that of the Mexican plant. It was first brought into bloom by John Brampton, Esq., of Stoke Newington, a gentleman who cultivates a small but very select collection of stove and greenhouse plants.

We learn from Mr. Tate, that the young shoots of his Mexican Cactus have a deep red margin, which is not the case with the mules above referred to.

This is a most desirable species, excelling in brilliancy of colouring even the well-known C. speciosissimus; its anthers and stigmata are said by Mr. Haworth to exhibit a beautiful, changeable, rosy, violet appearance. It requires exactly the same treatment as C. phyllanthoides, truncatus, and similar species.

J. I.



Hart del. Engraved by J. Ainsworth & Pl. Lizars, 1838

ACÁCIA* uncináta.

Hook-leaved Acacia.

POLYGAMIA *MONŒCIA.*

Nat. ord. LEGUMINOSÆ. § *Mimoseæ.*
ACACIA. — *Suprà, vol.* 2. *fol.* 98.

Sect. 1. *Foliis deformatis, nempè: foliolis sæpiùs, præsertim in planta adulta, abortivis, petiolis dilatatis in Phyllodia mutatis.* Dec. prodr. 2. 448.

A. *uncinata;* stipulis minimis caducis, phyllodiis ovato-oblongis obliquis marginatis apice falcatis mucronatis ramisque pubescentibus, capitulis solitariis axillaribus phyllodiorum longitudine.

Rami *pilosi, rubro-fusci, teretes.* Stipulæ *minimæ, deciduæ.* Phyllodia *ovato-oblonga, obliqua, undulata, mucronata, utrinque acuminata, apice falcata, margine incrassata, undique pubescentia, costâ unicâ in medio.* Capituli *pisi magnitudine, flavescentes, pedunculati; pedunculo filiformi pubescente phyllodiorum longitudine.*

A neat greenhouse plant, native of New Holland. Our drawing was made in the Greenhouse of the Comte de Vandes in July 1828.

It is very near A. armata, from which it chiefly differs in the absence of spiny stipules, and in the greater breadth of the leaf-like petioles.

Branches hairy, reddish brown, taper. *Stipules* very small, deciduous. *Phyllodia* ovate-oblong, oblique, wavy, mucronate, acuminate at each end, falcate at the apex, thickened at the margin, downy on all sides, with a single rib in the middle. *Heads* the size of a pea, pale yellow, stalked. *Peduncle* filiform, downy, the length of the phyllodia. J. L.

* See fol. 1317.



PODOLÓBIUM* trilobátum.

Three-lobed Podolobium.

DECANDRIA *MONOGYNIA.*

Nat. ord. LEGUMINOSÆ. § *Sophoreæ.*

PODOLOBIUM R. Br.—*Calyx* 5-fidus, bilabiatus, labio superiore bifido, inferiore 3-partito. *Corollæ* carina compressa longitudine alarum vexillum explanatum subæquantium. *Ovarium* simplici serie 4-spermum; *stylus* ascendens; *stigma* simplex. *Legumen* pedicellatum, lineari-oblongum, modicè ventricosum, intùs læve.——Suffrutices *habitu* Chorizematis, *et fortè cum hoc genere, Smithio præeunte, conjungendæ.*—Dec. prodr. 2. 103.

P. *trilobatum;* foliis oppositis spinoso-dentatis subtrilobis, basi transversâ, lobis lateralibus terminali dentato multoties brevioribus, ovario sericeo.—*Dec. l. c.*

Pultenæa ilicifolia. *Botanist's repository, tab.* 320.

Chorizema trilobatum. *Smith trans. Lin. Soc.* 9. *p.* 253.

Podolobium trilobatum. *Brown in hort. Kew.* 3. *p.* 9. *Sims bot. mag. t.* 1477.

A pretty greenhouse shrub, introduced so long since as the year 1791 by Messrs. Lee and Kennedy, but not very common in collections. Our drawing was made in the Garden of the Comte de Vandes at Bayswater, in June 1825, where the great beauty of its lively yellow and red flowers particularly excited our attention.

It is increased chiefly by cuttings, which, however, do not strike very freely.

The leaves of this, and some other Leguminous plants, are opposite; a striking exception to the general fact, that in that order they are alternate; and a proof that what Botanists consider even the most fixed characters are occa-

* From πους ποδος, a foot, and λοβος, a bean-pod; in allusion to the stalked legumes of the genus.

sionally liable to deviation ; so imperfect are the means we at present possess of distinguishing, by external indications, the constitutional peculiarities of vegetation.

Another species is represented at fol. 959 of this work, but it is far inferior in beauty to the present.

J. L.



JUSTÍCIA* guttáta.

Dotted-flowered Justicia.

DIANDRIA *MONOGYNIA.*

Nat. ord. ACANTHACEÆ.
JUSTICIA. — *Suprà, vol.* 4. *fol.* 309.

J. *guttata;* caule subsimplici erecto, foliis oblongis utrinque attenuato-acutis subcrenulatis brevè petiolatis lævibus, racemo terminali, floribus fasciculatis, dentibus calycinis bracteisque linearibus, labio corollæ superiore recto bilobo lateribus reflexo, laciniis labii inferioris ovatis obtusis patentibus, antheris nudis carnosis erectis demùm divaricatis: loculis anticis parallelis gracilibus. — *Wallich plantæ asiaticæ rariores, vol.* 1. *p.* 24. *tab.* 28.

Our drawing of this curious plant was made at the Garden of the Horticultural Society, to which establishment it had been presented by the Honourable Court of Directors of the East India Company. It is a tender stove perennial, flowering in August, and increasing freely by cuttings.

The only work in which it has before been described is Dr. Wallich's splendid publication upon a select number of East Indian plants, now appearing in quarterly Parts, under the munificent patronage of the East India Company. From this we learn that our species is a native of the Pundua mountains, on the eastern frontier of Bengal, where it flowers in the early part of the year.

The marking of the corolla with deep blood-red spots upon a greenish ground is exceedingly pretty: when closely examined, it will be found to arise from the presence of a deep crimson colouring matter filling here and there the

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* See fol. 1227.

cavities of the cellular tissue of the parenchyma, and not existing in that part which forms the ground colour. When will natural philosophy tell us why contiguous spaces on a plane surface, the function and anatomical structure of which is uniform, vary thus in the matter they secrete?

J. L.


1335.

BRUNSVÍGIA* grandiflóra.

Large-flowered Brunsvigia.

HEXANDRIA *MONOGYNIA*.

Nat. ord. AMARYLLIDEÆ.
BRUNSVIGIA.—Suprà, vol. 3. *fol.* 192.

B. *grandiflora ;* foliis ligulatis erectis obtusis, umbellâ patente trigintiflorâ, perianthiis patentibus : laciniis subæqualibus vix obliquis.
Bulbus *ovalis, collo nullo.* Folia *ligulata, pallidè viridia, falcata, plana, erecta, margine scabriuscula.* Scapus *ascendens, compressus, leviter glaucus,* 1½*-pedalis.* Umbella *patens, trigintiflora ;* spathâ *bifoliâ: foliolis ovatis, membranaceis, pallidè brunneis, acuminatis.* Pedunculi *teretes.* Perianthium *sexfidum, subæqualiter patens, laciniis carneis, lineari-oblongis, undulatis, obtusiusculis, subrecurvis ; interioribus latioribus.* Stamina *fauce inserta, declinata, perianthio paulò breviora ; filamenta subulata.* Ovarium *viride, teretiusculum, ovale, triloculare ; ovulis numerosis carnosis, distichis.* Stylus *filiformis, declinatus.* Stigma *parvum, obscurè trilobum, papillosum.*

This noble addition to the genus Brunsvigia was sent us, in August 1829, by Mr. Tate, of Sloane Street, to whom we have on former occasions had to express our obligations for favours of the same description. It is no doubt a native of the Cape of Good Hope, and requires the same treatment as other Brunsvigias.

Mr. Herbert, to whom the drawing has been shewn, considers it new, approaching B. striata in flower, though larger, but differing entirely in bulb and foliage, and in those respects coming near B. Josephinæ. B. striata has recumbent leaves, and a bulb like a turkey's egg, with the coat hard and shining as porcelain, of the colour of a yellow bay horse ; all characters at variance with those of the species now described.

* See fol. 1153.

Bulb oval, with no neck. *Leaves* ligulate, pale green, falcate, flat, erect, roughish at the edge. *Scape* ascending, compressed, somewhat glaucous, a foot and a half high. *Umbel* spreading, with about 30 flowers. *Spathe* 2-leaved; leaflets membranous, pale brown, acuminate. *Peduncles* taper. *Perianthium* 6-parted, nearly equally spreading, segments flesh-coloured, linear-oblong, wavy, bluntish, somewhat recurved; the inner the broadest. *Stamens* inserted into the throat, declinate, rather shorter than the perianth; *filaments* subulate. *Ovarium* green, taper, oval, 3-celled, with numerous fleshy, distichous ovules. *Style* filiform, declinate; *stigma* small, obscurely 3-lobed, papillose.

J. L.



M. Hart del. Pub. by J. Sowerby Mer. Piccadilly, June 1st. 1830 W. H.

KENNÉDYA* monophýlla; *var.* longiracemósa.

Long-racemed variety of the One-leaved Kennedya.

DIADELPHIA *DECANDRIA*.

Nat. ord. LEGUMINOSÆ.
KENNEDYA. — *Suprà, vol.* 11. *fol.* 944.

K. *monophylla;* foliolis in apice petioli solitariis glabris reticulatis subcordatis, stipulis lanceolatis erectis, racemis multifloris petiolo multò longioribus. *Dec. prodr.* 2. 384.
Glycine bimaculata. *Bot. mag.* 263.
Kennedya monophylla. *Vent. malm.* 1. 106, &c.
Var. longiracemosa; racemis gracilibus foliis longioribus v. subæqualibus, floribus minoribus.

For this distinct variety of Kennedya monophylla we are indebted to Mr. Rollisson, of Tooting, by whom it was raised from New Holland seeds. We call it variety, because it is so extremely similar in foliage and general appearance to its prototype, that we cannot believe it to be a distinct species; but at the same time it must be admitted, that the great length of the racemes, and the colour of the flowers, give it an aspect peculiar to itself.

It is a greenhouse plant, of much beauty, propagated readily by cuttings. Mr. Ridgway observed, that it secreted a great deal of honey while in his possession. Flowers in March and April. J. L.

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* The late Mr. Kennedy, a partner in the celebrated Nursery of Lee and Kennedy, was the gentleman in compliment to whom this genus was named by a French Botanist, at a time when a strict correspondence was maintained between his firm and the amiable and unfortunate Empress Josephine upon Horticultural subjects, while France and England were plunged in a furious and fatal war. Such is the gentle influence of science, which flourishes regardless of foreign convulsions or intestine strife, appearing the more beautiful when surrounded by, and subduing, the fiercer feelings of society.



*PÓTHOS** scándens.

Climbing Pothos.

TETRANDRIA *MONOGYNIA.*

Nat. ord. AROIDEÆ.

POTHOS. — *Spadix* undique floribus hermaphroditis tecta. *Calyx* nullus v. tetrasepalus. *Stamina* definita. *Ovarium* uniloculare, 1-3-spermum; ovulis ascendentibus v. appensis. *Bacca* 1-locularis, oligosperma. —— Herbæ *v.* arbusculæ *nunc scandentes.*

P. *scandens;* epiphyta, radicans, petiolis alatis foliorum longitudine, foliis ovato-lanceolatis, spathis axillaribus, spadice subgloboso.
Ana-Parua. *Rheede Hort. malab.* 7. 75. *t.* 40.
Appendix duplo folio. *Rumph. amboin.* 5. 490. *t.* 184. *f.* 2.
Pothos scandens. *Linn. sp. pl.* 1347. &c. &c. &c.

A native of various parts of the East Indies, particularly Ceylon, and the islands of the Eastern Archipelago: it is not unfrequently seen upon the drawings of the Chinese, when it is usually represented in fruit, with its clusters of deep scarlet berries.

It is particularly distinguished by its foliaceous petioles; but it is not improbable that more species than one has this character; and if so, that now represented, in which the petioles are remarkably short, may be different from the genuine Cingalese species, in which the petioles are as long as the leaves, or nearly so, and the spadixes larger. The plant from which our drawing was made was imported from China by Mr. Tate, in whose Nursery it was taken in April last. The flowers are most deliciously fragrant.

* *Potha* being the Cingalese name of the species now described, it has been applied to the whole genus.

The following is the description in the *Flora Indica*, 1. 450. of the Indian plant:—

"*Stems* as thick as a slender ratan, often ramous, rooting upon trees in the most shady forests, round, smooth, and less succulent than any other species which I have yet met with, except P. *gracilis*. *Leaves* alternate, petioled, lanceolate, entire, smooth; length from two to four inches, breadth about an inch. *Petioles* most amply winged, so as to be nearly as broad as the leaves themselves, almost as long, equally entire, smooth, and marked with similar veins. *Peduncles* axillary, solitary, clothed with many small, ovate, bractiform scales, up to the spathe, where they are completely recurved. *Spathe* boat-shaped, erect. *Spadix* globular, reflex. *Calyx* or *coral* some roundish scales mixed amongst the germs, and of nearly the same length, the exact number to each germ not ascertained. *Stamina* about four obovate scales to each germ, with two polliniferous pits on the inside, under the retuse apex. *Germs* many, oblong, 1-celled, with one, two, or three ovula attached to the bottom of the cell, and immersed in a clear gelatinous liquid. *Style* none. *Stigma* an umbilicated elevation on the apex of each germ. *Berries* oblong, size of a French bean, red, pulpy, 1-seeded. *Seed* solitary, or two conform to the berry."

J. L.



M. Hart. del. Pub. by J. Hodgson & Co. Newcastle, June 1 1838 Hull sc.

TILLANDSIA* stricta.

Erect Tillandsia.

HEXANDRIA *MONOGYNIA*.

Nat. ord. BROMELIACEÆ.
TILLANDSIA.—Suprà, vol. 2. *fol.* 105.

T. *stricta;* foliis canaliculato-subulatis pruinoso-canescentibus, spicâ multiflorâ terminali. *Spreng. syst.* 2. 24.
T. stricta. *Bot. mag.* 1529.
Folia *recurva, pruinoso-lepidota, lanceolata, acuminata, convoluta, scapo longiora.* Scapus *strictus, minùs lepidotus.* Flores *amœnè et intensè cærulei, bracteis magnis, ventricosis, oblongis, acutis; inferioribus cuspidatis.* Petala *apice ovata, acuta, patentia, bracteis æqualia.*

Native of Buenos Ayres and Brazil; from the former of which countries it was received by Peter Kendall, Esq., a zealous cultivator of curious hothouse plants, who presented it to the Horticultural Society. Our drawing was made in the Chiswick Garden in March last.

This is among the most beautiful of its tribe, and one that is very easily cultivated. Mr. Kendall finds it succeed remarkably well with the following treatment. In June he takes it out of the stove, and suspends it from a wall in the open air, where he leaves it without water, attention, or protection, till the succeeding October; thus creating a sort of artificial winter. When the time for placing it again in the stove arrives, it is found withered, discoloured, and in appearance half dead: as soon, however, as it is again submitted to heat and moisture, it recovers rapidly, commences a new and vigorous growth, and in the course of a few weeks loses all trace of its previous sufferings,

assuming a rich healthy vegetation. After throwing out suckers from each side, it shoots up its spikes of bright blue flowers, which begin to open in March, and endure till the end of April: when the period for a cessation of growth draws near, its parts harden, its flowers fall away, and by June it is ready again to undergo the same treatment as before.

It is no doubt desirable to create an artificial winter or cold season for all tropical plants, if it be possible; but this is generally impracticable; and, although Mr. Kendall's management succeeds with this, and two or three similar plants from the same part of the southern hemisphere, it by no means follows that it can be applied generally; on the contrary, we know from experience that Brazilian and West Indian epiphytes of the Orchis tribe are destroyed by it.

Leaves recurved, covered with a kind of frost-like scale, lanceolate, acuminate, convolute, longer than the scape. *Scape* erect, less scaly. *Flowers* bright deep blue, with large, ventricose, oblong, acute bracteæ, of which the lowermost are cuspidate. *Petals* ovate, acute, and spreading at the end, as long as the bracteæ.

J. L.



M. Hart. del. — Pub. by J. Ridgway 167 Piccadilly July 1. 1830. — J. Mills sc.

PASSIFLÓRA* liguláris.

Strapped Passion-flower.

MONADELPHIA *PENTANDRIA.*

Nat. ord. PASSIFLOREÆ.
PASSIFLORA. — *Suprà, vol.* 1. *fol.* 13.

Sect. 6. Granadilla. *Dec. mem. soc. gen.* 1. *part* 2. *p.* 435. *Prodr.* 3. 327.—Anthactinia. *Bory de St. Vincent ann. gen.* 2. 138.
Involucrum sub flore triphyllum, foliolis integris dentatisve non laciniatis. Calyx 10-lobus. Pedicelli uniflori et cirrhi simplices ex iisdem axillis. *Dec.*
* *Foliis integris.*

P. *ligularis*; involucro sub flore triphyllo: foliolis ovatis serratis, foliis glabris cordatis integerrimis, petiolis glandulas subsex filiformi-clavatas gerentibus, stipulis ovato-acuminatis, pedunculis solitariis unifloris. *Hooker in bot. mag.* 2967.

P. ligularis. *Juss. ann. mus.* 6. *t.* 40. *Humb. Bonpl. et Kunth nov. gen. et sp.* 2. 128. *Kunth synopsis* 2. 433. *Decand. prodr.* 3. 328.

This fine species belongs to a tribe of Passion-flowers, known in America by the name of Granadillas, which they acquired from the Spaniards in consequence of the resemblance borne by their fruit to the Grenade or Pomegranate. The three that are most commonly cultivated for the sake of this fruit, which is a kind of melon filled with numerous seeds, immersed in a quantity of pleasant subacid pulp, are P. quadrangularis, edulis, and alata; Passif. laurifolia and maliformis are also sometimes grown, but they are less esteemed. This kind is nearly related to the two first, from which it is known both by the absence of angles or wings from its stem, and by the

* The ingenuity of some of the old Botanists discovered in these beautiful flowers an emblem of the passion of our Saviour; the filamentous processes were the crown of thorns dripping with blood, and the stamens were the cross.

long, thread-like processes proceeding from the petiole; processes that occupy the place of the petiolar glands so common in the genus, and analogous to the ciliæ found upon the leaf-stalk of some Apocyneous plants. The fruit of P. ligularis is said to be eatable, and the size of an orange; that of P. quadrangularis is frequently three times as large.

Hitherto this has been described as a native of Peru: it would, however, seem from the Garden name, P. mexicana, under which it was purchased from Mr. Knight, of the King's Road, by Mr. Gordon, of Haffield, near Ledbury, to be perhaps spread northwards over a large extent of country. The specimens from which the accompanying drawing was taken were obligingly communicated in February by Mr. Gordon, who informs us that the plant grows luxuriantly in the front border of a Conservatory for tropical plants heated by hot water.

A leaf of this species is represented by M. Decandolle in his *Organographie*, t. 39. f. 5. to illustrate a transformation of glands into tendrils.

J. L.



W. Hart del. Pub. by J. Ridgway 10 [illegible] July 1830 S. Watts sc.

JUSTÍCIA* quadrangulàris.

Square-stalked Justicia.

DIANDRIA *MONOGYNIA*.

Nat. ord. ACANTHACEÆ.
JUSTICIA. — *Suprà, vol.* 4. *fol.* 309.

J. *quadrangularis;* foliis ovato-lanceolatis petiolatis subdentatis acuminatis, spicâ multiflorâ, bracteis subulatis, corollæ fauce ventricosâ, antherarum loculis parallelis.
J. quadrangularis. *Hooker bot. mag.* 1340.
J. asperula. *Wallich MSS.*

Planta 2-*pedalis*, *erecta*, *caule spithamæo*, *ramis rigidiusculis*, *gracilibus*, *erectis*, *supra insertionem foliorum valdè nodoso-ventricosis*, *angulis* 4 *tenerrimis*, *pubescentiâ asperulâ*. Folia *internodia æquantia*, *ovalia*, *acuminata*, *deorsùm attenuata*, *marginibus minutiùs repando-subcrenatis*, *medio convexis*, 4-*pollicaria*, *atroviridia*, *suprà nitida*, *lævia*, *subtùs costâ puberulâ nervisque reticulatis scabriuscula*. Petioli *ferè pollicares*. Racemi *terminales*, *erecti*, 6-*pollicares*, *et ultrà*, *subtetragoni*, *stricti*, *pubescentes*. Rachis *crassiuscula*, *tetragona*. Fasciculi *florum mediocrium decussati*, *subsessiles*. Flores *ternati*. Bracteæ *subulato-lanceolatæ*, *acuminatissimæ*, *calycum apices attingentes*, *oppositæ*; *inferioribus subfoliaceis*. Pedicelli *brevissimi*, *crassiusculi*. *Laciniæ* calycis *lineari-subulatæ*, *tubum corollæ ex albo dilutissimè carneæ leviter compressum æquantes*. Faux *cernua*, *ampla*, *ventricosa*, *labio superiore bilobo*, *inferiore* 3-*lobo*, *lobis lanceolatis*, *acutiusculis*. Labium *inferius majus*, *valdè deorsùm prominens*, *supra concavum excavatum et directione laciniæ intermediæ luteo-punctatæ*. Corolla *extùs puberula*. Antheræ *purpurascentes*, *majusculæ*, *dorso puberulæ sub*

A native of Sylhet, whence it was introduced into the Botanic Garden, Calcutta, in August 1822. With us it forms a small bush in the stove, flowering in October. Our drawing was made in the Garden of the Horticultural Society in 1829.

* Named after a Mr. James Justice, a person who was known as a Horticultural amateur at the end of the seventeenth century.

Dr. Hooker, in publishing it in the *Botanical Magazine*, changed the name of *asperula*, which he was not aware was one of Dr. Wallich's, into *quadrangularis*, because he could discover no asperity to justify the former appellative. We follow him in his alteration, as the minute asperity which is visible in dried specimens is such as to be hardly appreciable.

A tender stove plant, easily managed in a damp, hot atmosphere, and readily propagated by cuttings.

J. L.



PHYCELLA* Herbertiána.

Mr. Herbert's Phycella.

HEXANDRIA *MONOGYNIA.*

Nat. ord. AMARYLLIDEÆ.

PHYCELLA Lindl. *Suprà, vol.* II. *fol.* 928.—*Perianthium* subringens, convoluto-clausum, 6-partitum: tubo brevissimo. *Stamina* 6, declinata, fauce tubi inserta; alternis brevioribus; nunc basi appendiculata, nunc intra annulum fimbriatum inserta, nunc appendicibus annuloque destituta. *Stylus* declinatus; *stigma* simplex, incrassatum. *Capsula* trilocularis, polysperma, seminibus atris planis membranaceis. —— Plantæ bulbosæ *Americæ australis temperatæ*, floribus *rubris purpureisve, integumentis bulborum atris.*

P. *Herbertiana*; foliis linearibus recurvis, umbellâ triflorâ, perianthio arcuato: laciniis acutis, staminibus basi inappendiculatis intra annulum faucis fimbriatum insertis.

Bulbus *integumentis exterioribus atris, collo longissimo subterraneo* (*in spontaneo* 4½ *uncias longo*). Folia *linearia, recurva, scapo erecto, tereti multò breviora.* Umbella *triflora, bracteis spathaceis binis pedunculorum longitudine.* Perianthium *rubro-purpureum, subarcuatum, ferè duas uncias longum, laciniis acutis, ringentibus.* Stamina *declinata, alterna breviora, basi tubi intra annulum fimbriatum inserta, appendicibus nullis.* Stylus *declinatus, filiformis;* stigma *simplex, incrassatum.*

A native of Cumbre, a pass in the Andes between Valparaiso and Santiago, where it was found by Mr. M'Rae, in November 1825, flowering in company with many other curious and beautiful plants. It appears, from his specimens, to have vegetated in a deep black soil, and to have had its bulbs buried at least four or five inches below the surface.

The origin of this word is φῦκος, a purple pigment, and refers to the prevailing colour of the flowe[illegible] The species is named in compliment to the Hon. and Re[illegible] whose acquaintance with the beautiful tribe to which this belongs is unequalled

Brought to the Garden of the Horticultural Society, it flowered in the Greenhouse in May 1827, at which time our drawing was made.

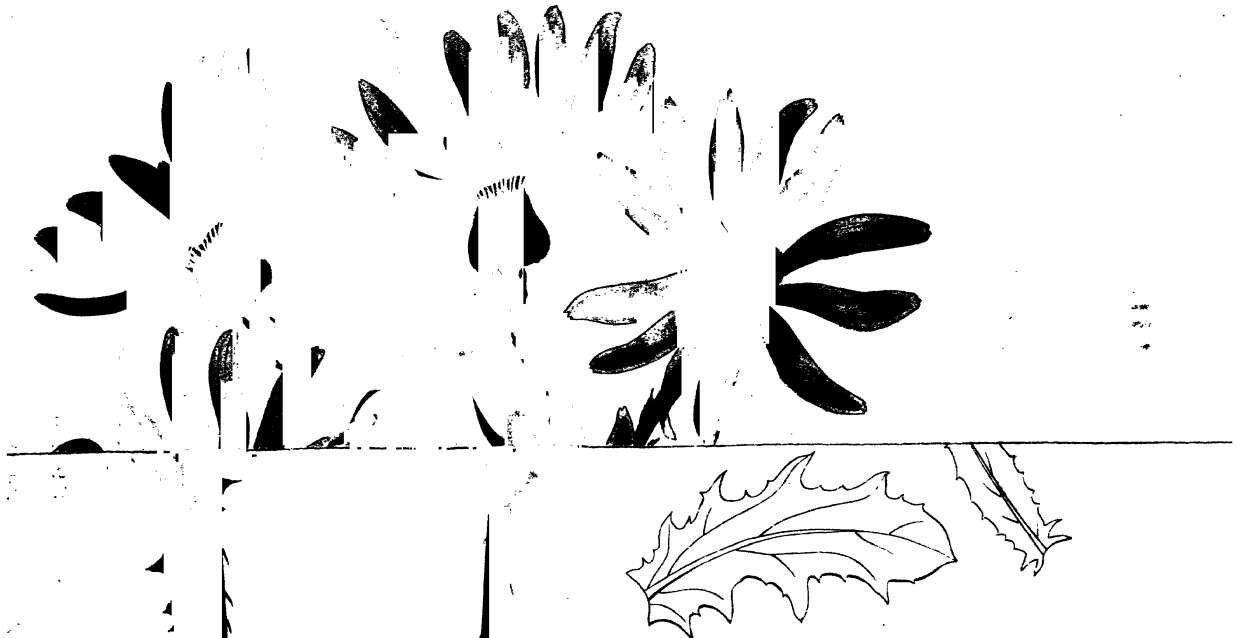
Having lately had some correspondence with Mr. Herbert upon the subject of the characters assigned to this genus at fol. 928, and further adverted to at fol. 1016, p. 2, we have been led to reconsider the structure of those processes which are there called sterile stamens, and upon which the genus was chiefly founded. Mr. Herbert, to whom we are extremely obliged for his remarks, observes, that "in describing Phycella ignea v. glauca in the *Botanical Magazine*, fol. 2687, he stated his opinion that these bodies were not sterile stamens, but only membranous processes; and that, considering them of less importance than we attached to them, he adverted to them in the specific, and not in the generic character, in the persuasion that species would hereafter be found without them." The original species, Amaryllis ignea, upon which the genus was founded, had, as is stated at fol. 928, two subulate processes, proceeding from the base of the three calycine stamens: they were one-third the length of the filaments to which they were attached, and having the position which would be that of additional stamens, supposing such to be present, they were described as being so, but sterile. But the glaucous variety does not possess the same structure, having mere irregular membranous processes, instead of the subulate bodies of its original. Now, as these two plants are not easily distinguished even as varieties, it is clear that Mr. Herbert was right in estimating of little value, with a view to generic distinction, the peculiarity upon which the genus was originally founded. The justness of this decision, to which we were at one time unwilling to assent, is confirmed by the species now described, in which the stamens have no appendages at their base, but are inserted within a fringed annular border; by a second sent from Mendoza by Dr. Gillies, in which this border is broken up into three faucial scales; and, lastly, by a third, collected in Chile by Mr. M'Rae, in which there appears to be neither appendages nor border. The character of the genus Phycella will therefore depend upon the convolutely-imbricated perianthium, the declinate style, and the simple thickened stigma; and not upon the

presence or absence of the processes. But while we assent thus fully to the justness of Mr. Herbert's criticism in regard to the value of these processes as a generic distinction, we do not admit the accuracy of his view of their nature. That they are really indications, more or less complete, of a tendency to develope additional stamens, may perhaps be made apparent by a consideration of the structure of other Amaryllideous genera. This order may be said to have normally the same number of stamens as segments of the perianthium, that is to say, two complete whorls; but at the same time to indicate a strong tendency to the production of another set of stamens between the perianthium and those stamens which actually develope. This is apparent in the cup of Narcissus, in the faucial appendages of Amaryllis calyptrata, and the like, in Mr. Miers' genus Placea, in which six petaloid filaments are superadded to the antheriferous ones, and especially in the genus Gethyllis, in which additional whorls of stamens are constantly completed, so that some of the species are actually polyandrous. It is no argument against the processes of Amaryllideæ, whether a cup, or scales, or subulate bodies, or mere glandular projections, being sterile stamens, to say that they do not bear anthers, or to insist upon their variable size and form. These are considerations which can have no weight when contrasted with their uniformity of station, their insensible passage from the most rudimentary state to one of high development; and finally, with those monstrous Galanthuses, which in forming supernumerary parts between the petals and stamens, continually produce a half perfect anther upon their additional floral envelopes.

The genus Sphærotele of Presl, to which that author thinks Amaryllis ignea and cyrtanthoides referable, is clearly not the same as Phycella, as might be thence inferred; but is nearer Chrysiphiala, from which it differs, according to the figure and description, in its stigma, and in the want of a cup.

Bulb covered with a deep brown skin, and having a very long subterraneous neck. *Leaves* linear, recurved, much shorter than the erect, taper scape. *Umbel* 3-flowered, with two spathaceous bracteæ the length of the peduncles. *Perianthium* reddish purple, somewhat curved, about two

inches long; the segments acute and ringent. *Stamens* declinate, alternately shorter, inserted at the base of the tube within a fringed ring, without appendages at the base. *Style* declinate, filiform; *stigma* simple, thickened.



M. Hart del. Published by J. Ridgway 1839 Piccadilly Aug.st 1.1839 J. Watts sc.

*SENÉCIO** lilacínus.

Lilac Senecio.

SYNGENESIA POLYGAMIA *SUPERFLUA.*

Nat. ord. COMPOSITÆ. Trib. *Senecioneæ-Archetypæ* Cassini.
SENECIO.—Suprà, vol. 1. *fol.* 4).

S. *lilacinus;* glaberrimus, caule suffruticoso erecto, foliis semiamplexicaulibus subdecurrentibus ovato-lanceolatis acutis basi grossè inæqualiter acutè dentatis, capitulis corymboso-paniculatis, radio maximo (lilacino).

Caulis *erectus, glaberrimus, suffruticosus, striatus.* Folia *sessilia, semiamplexicaulia, ovato-lanceolata, sub-decurrentia, basi inæqualiter acutè dentata, apice acuta integra; inferioribus magis dentatis.* Capituli *corymboso-paniculati, pedunculis hic illic bracteolatis.* Involucrum *conicum, simplici serie polyphyllum, basi multibracteolatum, foliolis rigidis, costatis, apice sphacelatis, margine membranaceis.* Receptaculum *planum, favosum.* Flosculi radii *fœminei, tubo basi clavato, ligulæ planæ patentis apice denticulatæ dimidiâ longitudine.* Stylus *basi clavatus, tubo inclusus;* stigmata *exserta, linearia, glabra, apice obtusa, epapillosa;* ovarium *subcylindricum, teres, pubescens;* pappo *capillaceo, scabro.* Flosculi disci *hermaphroditi, tubulosi, apice 5-dentati, basi clavati.* Antheræ *basi muticæ, apice appendiculâ ovatâ instructæ;* filamento *brevissimo, ovato.* Ovarium *teres, pubescens;* pappus *ut in flosculis radii.* Stylus *basi incrassatus.* Stigmata *linearia, intùs sulcata, apice truncata, papillosa.*

from the Garden of his Grace the Duke of Northumberland at Syon, by Mr. Forrest, in May last. A most lovely shrubby plant, cultivated easily in the Conservatory, striking freely from cuttings, and well adapted for the flower-garden in the summer.

Probably a native of the Cape of Good Hope; but upon this we have no certain information.

It is here published under the name by which it was

* The Senecio of Pliny was so called because its leaves have gray down, like old men's hair—from *senex*, an old man.

sent us by Mr. Forrest, appearing to have been hitherto undescribed. Its nearest affinity will probably be found with S. lanceus of the *Hortus Kewensis*, which would appear to be distinct from the plant of the same name figured in the *Hortus Schönbrunnensis*, which Willdenow called oporinus; the latter with pale-yellow flowers, and the tips of the serratures of the leaves callous; the former having the leaves finely and regularly serrated.

We presume this forms part of M. Cassini's genus Jacobæa; and it certainly has little in its appearance to justify its union with Common Groundsel, in the same genus.

Stem erect, quite smooth, suffruticose, striated. *Leaves* sessile, half amplexicaul, ovate-lanceolate, somewhat decurrent, at the base unequally and acutely toothed, at the apex acute and entire; the lowermost more toothed than the rest. *Heads* in corymbose panicles; the peduncles with little bracteæ here and there. *Involucrum* conical, many-leaved, in a simple row, with many little bracteæ at the base; *leaflets* rigid, ribbed, sphacelate at the apex, membranous at the margin. *Receptacle* flat, honey-combed. *Florets of the ray* female; the tube clavate at the base, about half as long as the plane, spreading, toothed ligula. *Style* clavate at the base, included in the tube; *stigmas* exserted, linear, smooth, obtuse at the end, without papillæ; *ovarium* somewhat cylindrical, taper, pubescent; *pappus* capillary, scabrous. *Florets of the disk* hermaphrodite, tubular, 5-toothed at the apex, clavate at the base. *Anthers* spurless at the base, with an ovate appendage at the apex; *filaments* very short, ovate. *Ovarium* taper, pubescent; *pappus* as in the florets of the ray; *style* thickened at the base; *stigmas* linear, channelled inside, truncate at the apex, with papillæ.



ARGEMÓNE* mexicána; *var.* ochroleuca.

Mexican Argemone; the pale-yellow variety.

POLYANDRIA *MONOGYNIA.*

Nat. ord. Papaveraceæ.
ARGEMONE.—Suprà, vol. 15. *fol.* 1264.

A. *mexicana;* annua; foliis spinoso-dentatis maculatis, capsulis calycibusque spinosis.
A. mexicana. *Linn. sp. pl. and of all others.*
β. *albiflora;* white variety. *Bot. mag. t.* 2342.
γ. *ochroleuca;* pale-yellow variety.
A. ochroleuca. *Hort. angl.*

The Argemone mexicana, a weed in Mexico, whence it has spread to various tropical countries, is a very old inhabitant of our Gardens as a tender annual. Some years since, a variety with white flowers was obtained and figured in the *Botanical Magazine;* and subsequently the kind now represented was procured by Mr. Barclay. It is an annual, like its original, but not so handsome: it is, however, more valued, on account of its greater rarity.

We may here remark, that Argemone grandiflora is called by mistake an annual at fol. 1264: it is a durable and very beautiful perennial.

J. L.

See fol. 1264.



CRASSULA* turríta.

Turretted Crassula.

PENTANDRIA *PENTAGYNIA.*

Nat. ord. CRASSULACEÆ.

CRASSULA Linn.—*Calyx* 5-partitus corollâ multò brevior, sepalis planiusculis. *Petala* 5, stellatim patentia, libera. *Stamina* 5, filamentis subulatis. *Squamæ* 5, ovatæ, breves. *Carpella* 5, polysperma.——Frutices *aut* herbæ, *sæpissimè Capenses.* Folia *opposita, integerrima aut subcrenata.* Flores *albi, aut rariùs rosei.*—Dec. prodr. 3. 383.

§ 8. Turgoseæ; *herbaceæ subnudæ, foliis plerisque radicalibus, inflorescentiâ spicato-thyrsoideâ, floribus nempè verticillato-subsessilibus. Species omnes verosimiliter biennes.* Dec. l. c.

C. *turrita;* foliis radicalibus oppositis connatis quadrifariàm imbricatis ovato-oblongis acutis villosis ciliatis, caule subnudo, floribus verticillatis. *Dec. l. c.*

Crassula turrita. *Thunb. prodr. 55. Jacq. hort. schönbr.* 1. *t.* 52. *Haworth suppl.* 17.

Turgosea turrita. *Haworth revision* 16.

This remarkable succulent plant is a native of the Karro, at the Cape of Good Hope, where it was originally found by Thunberg. It is still rare in our collections, although it was described eleven years since by Mr. Haworth from the Kew Garden.

For our drawing we are indebted to C. Law, Esq., of 4, Nelson Terrace, Stoke Newington Road, by whom a specimen was communicated in May last, from his very rich collection of succulent plants. We regret to learn, that Mr. Law is induced by ill health to wish to discontinue the cultivation of this curious tribe, and to desire to

* From *crassus*, thick; in allusion to its succulent habit.

dispose of his collection, which is one of the most interesting in the neighbourhood of London.

Usually considered a biennial; but the plant from which the accompanying drawing was taken had been in Mr. Law's possession for four years. Increased by seeds, which it ripens unwillingly, and also by offsets.

To Mr. Haworth's very careful description in the work above cited, we find nothing to add, further than that the sepals are so completely similar both in form and texture and anatomical structure to the leaves, that no distinction whatever appears to exist between them.

J. L.









d



c

HABRA̅NTHUS* *Andersóni.*

Anderson's Habranthus.

HEXANDRIA *MONOGYNIA.*

Nat. ord. AMARYLLIDEÆ.

HABRANTHUS Herbert.—*Germen* medio constrictum; tubus æqualis. *Filamenta* declinata, fasciculata, recurvata, quaternâ longitudine. *Stylus* declinatus, recurvatus. *Semina* cumulata, complanata nigra.——Flos *sub sole patentior.*—Herbert MSS.

H. *Andersoni;* bulbo parvo obovato, foliis angustis 5-6-uncialibus, scapo unifloro subrubescente 3-4-unciali, spathâ unciali apice diviso, pedunculo 1½-unciali, germine subrubescente, corollâ 1⅝-unciali aureâ v. cupreâ, striis externis et fundo subfusco-rubescente, tubo ⅛-unciali membranâ intùs clauso, laciniis externis imbricantibus, filamentis internis longioribus: summo brevissimo stylo longiore.—*Herbert MSS.*

Var. α; *aurea.*

Var. β; *cuprea.*

Var. γ. *obscura;* alabastrum extus aterrimum.

Var. δ. *brevilimba;* foliis latioribus.

"This bright-coloured Habranthus was sent to Mr. Mackay by his collector, Mr. Anderson, with some other species, from Monte Video, in the spring of 1829. The bulbs flowered abundantly in the greenhouse of Mr. Mackay, at Upper Clapton, in April and May 1830; but the flowers do not expand well unless the sun shines bright and warm. They are either golden or copper coloured, with brownish red streaks on the outside, and forming within a dark eye to the flower. The specimens of the golden variety, which seems to be the most plentiful, vary a little in the breadth and colour of the leaves. The upper filament is the shortest of the three shorter, and the lowest is a little the shortest of the three longer filaments. If the weather is cold and gloomy, the flowers do not expand, and the filaments do not acquire their proper posture and proportions; and in that imperfect state it would be very difficult to decide whether the flower belonged to Habranthus, or the nearly allied

* So named from ἁβρὸς, delicate, and ἄνθος, a flower.

Since the plate was printed off, we have been favoured with another communication from the same gentleman, relating to the form of the seed-vessel; unfortunately, the drawing that accompanied it arrived too late to be introduced into the plate, which we regret the more, because Mr. Herbert is of opinion, that a difference in the form of the capsule goes along with the other generic distinctions of Zephyranthes and Habranthus. "All the capsules," he remarks, "of Zephyranthes that I have observed are like those of Z. rosea, represented in the *Botanical Magazine* as broad or broader at bottom than at top. As far as my observation goes, those of Habranthus are turbinate or narrower at bottom. I have now before me the capsules of several varieties of H. Andersoni, and of a variety of Habranthus versicolor, from the same quarter, still more turbinate: the capsules of three new species of Zephyranthes from the same quarter, are all broad at bottom. I propose to call them

Zephyranthes flavescens. *Flower at first straw-coloured, fading to white as it expands. Spathe half as long again as the peduncle, which is about an inch long.*

Zephyranthes mesochloa. *Flower green at bottom, yellowish white, tinged a little without with red. Peduncle nearly twice as long as the spathe.*

Zephyranthes acuminata. *Nearly white. Petals 2¼ inches long, but only ⅜ths wide. Peduncle and spathe of the same length.*"

We have only to remark, that the genus Habranthus has been proposed by Mr. Herbert to comprehend various South American bulbs, including Amaryllis advena and intermedia, figured at folios 849 and 1148 of this work; and that it stands upon the authority of that excellent observer rather than upon our own.

Reference to the Figure.

a. Golden variety.
b. Copper variety.
c. Ovarium, tube, and sexual apparatus.
d. An outer segment of the corolla of var. *a*.

J. L.



DRIMIA* villósa.

Villous-leaved Drimia.

HEXANDRIA *MONOGYNIA.*

Nat. ord. ASPHODELEÆ.

DRIMIA Jacq.—*Perianthium* 6-fidum, campanulatum, limbo reflexo: laciniis apice cucullatis. *Stamina* filamentis basi dilatatis, laciniarum basi inserta. *Stylus* cum ovario continuus; *stigma* triquetrum, incrassatum. *Capsula* 3-locularis, loculis dorso dehiscentibus, semibivalvibus. *Semina* angulo centrali loculamentorum affixa.

D. *villosa*; foliis oblongis undulatis glaucis villosis serotinis, racemo multifloro cylindraceo, perianthii limbo obliquo.

Folia *erecta, oblongo-lanceolata, undulata, pilosa, serotina, glauca.* Racemus *nudus, erectus, multiflorus.* Bracteolæ *breves, minimæ, ovatæ, pedicellis multò breviores.* Perianthium *sexfidum, tubo campanulato, carnoso, limbo obliquo: laciniis* 6, *lanceolatis, non imbricantibus, undulatis, apice cucullatis, demùm revolutis.* Stamina 6, *basibus laciniarum inserta, leviter declinata ob obliquitatem limbi*; filamentis *subulatis, basi dilatatis, in conum conniventibus.* Ovarium *superum, intrà tubum perianthii inclusum, triloculare, loculis serie duplici polyspermis*; stylus *ovario continuus declinatus*; stigma *incrassatum, triquetrum.*

A native of the Cape of Good Hope, whence it was received by Mr. Tate, in whose Nursery our drawing was made in May 1826.

A greenhouse bulbous plant, flowering before the leaves. It differs from Drimia ciliaris, to which it most nearly approaches, in the much greater breadth of its leaves, which are strongly undulated, and far more villous, and in a greater obliquity of the limb of the perianthium.

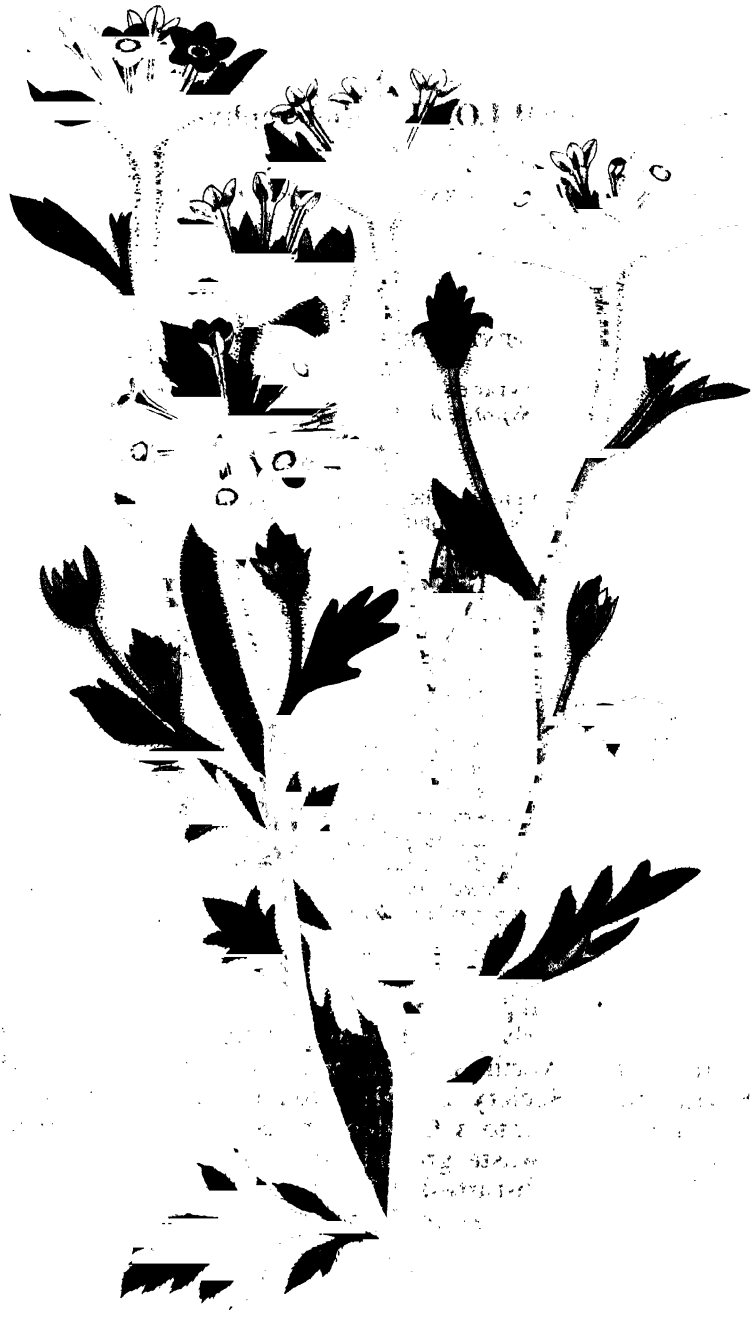
Those who may hereafter study the genus Drimia will do well to attend to the structure of the capsule, to the

* From δριμὺς, acrid; in allusion to the flavour of the leaves.

style being intruse, or continuous with the ovarium, to the obliquity of the limb, and to the number of the seeds; all points very little considered hitherto.

Leaves erect, oblong-lanceolate, undulated, hairy, appearing later than the leaves, glaucous. *Raceme* naked, erect, many-flowered. *Bracteolæ* short, very small, ovate, much shorter than the pedicels. *Perianth* 6-cleft, with a campanulate fleshy tube, and an oblique limb; the segments of which are 6, linear, not imbricating, undulated, cucullate at the apex, finally rolling back. *Stamens* 6, inserted into the base of the segments, slightly declinate on account of the obliquity of the limb; *filaments* subulate, dilated at the base, conniving into a cone. *Ovarium* superior, included within the tube of the perianth, 3-celled; *cells* many-seeded, in a double row; *style* continuous with the ovarium, declinate; *stigma* thickened, 3-cornered.

J. L.



M. Hart. del.

COLLÓMIA* heterophylla.

Various-leaved Collomia.



PENTANDRIA *MONOGYNIA.*

Nat. ord. POLEMONIACEÆ.
COLLOMIA. — *Suprà, vol.* 14. *fol.* 1166.

C. *heterophylla;* glanduloso-pubescens, foliis inferioribus pinnatifidis incisis, superioribus cuneatis pinnatifidis v. incisis, supremis (involucri) oblongis acutis integerrimis.

C. heterophylla. *Hooker bot. mag.* 2895.

Annua, prostrata, ramosissima, undique pilis glandulosis viscosis obsita. Folia *infima sublyrata, proxima pinnatifida laciniis oblongis incisis, superiora cuneata v. pinnatifida incisa, involucralia oblonga, acuta, integerrima, subverticillata.* Flores *congesti, subseni, involucro breviores.* Calyx *infundibularis, pentagonus, tubo membranaceo, limbo erecto; laciniis ovatis, acuminatis, foliaceis, sinubus leviter gibbosis.* Corolla *infundibularis, calyce duplò longior et multò angustior, tubo gracili pilosiusculo, limbo plano, roseo, 5-partito, laciniis oblongis, obtusis.* Stamina *5, quorum tria fauce inserta intermedio longiore, duo supra medium tubi subsessilia.* Ovarium *ovatum, 3-loculare, polyspermum.* Stylus *cum ovario continuus, filiformis;* stigmata *tria, linearia, intùs papillosa.* Ovarium *oblongum, calyce vestitum, 3-loculare, loculicidò dehiscens, loculis trispermis, valvulis ab axi placentiferâ triangulari secedentibus.* Semina *oblonga, utrinque truncata, testâ mucilaginosâ; embryo in axi albuminis carnosi.*

A little annual plant, beautiful when minutely examined, but not particularly attractive at first sight. Native of the north-west of North America, whence it was sent to the Horticultural Society by Mr. Douglas in 1826. When once introduced into a Garden, it soon becomes a weed, sowing itself in waste ground, or wherever the soil is suffered to rest undisturbed. It offers what seems to be an explanation of the nature of the supposed spiral vessels in

* See fol. 1166.

the testa of Coll. linearis. Its testa is in like manner mucilaginous, and, if examined with a high magnifier, is seen to be covered with an entangled mass of hairs, held together by the mucilage, and evidently analogous to the coma of some plants, but most particularly to those hairs that cover the surface of certain of the Convolvulus tribe, to which Polemoniaceæ have a strong affinity.

Dr. Hooker is undoubtedly right in referring this to Collomia, rather than to Gilia, where Douglas wished to place it.

J. L.



GEUM* chilense; *var.* grandiflórum.

Chilian Geum; *large-flowered variety.*

ICOSANDRIA *POLYGYNIA.*

Nat. ord. Rosaceæ.
GEUM.—Suprà, vol. 13. *fol.* 1088.

G. *chilense;* foliis caulinis tripartitis laciniatis radicalibus interruptè lyratis pilosis: lobo terminali rotundato subtrilobo crenato, floribus paniculatis, carpellis villosissimis.
G. chilense. *Balbis in Dec. prodr.* 2. 551.
G. coccineum. *Seringe in Dec. prodr.* 2. 551. *Suprà, vol.* 13. *fol.* 1088, non Floræ Græcæ.
G. Quellyon. *Hort.*
β. grandiflorum; *floribus duplò majoribus, colore multò intensiore.*

When this species was published, at fol. 1088, we had had no means of ascertaining whether it was the same as the Greek plant G. coccineum, or distinct from it. At the same time we stated, that it was undoubtedly the Chilian species, undistinguishable from specimens collected in the vicinity of Coquimbo by Mr. M'Rae. We have since had an opportunity, in consequence of the Herbarium connected with the Flora Græca having been confided to our charge, of examining what remains of the original specimen of G. coccineum; and we are now satisfied that it is really distinct. In this specimen no flowers are left, but the leaves have a very large terminal lobe, and minute lateral ones, so as to exhibit a different general appearance.

* "Geum radiculas tenues habet, nigras, bene olentes; medetur non modo pectoris doloribus aut lateris, sed et cruditates discutit jucundo sapore." *Plin. hist. l.* 26. *c.* 7. Hence, according to some, it is derived from γεύω, to taste; but then it cannot have been our Geum urbanum, as is thought, for its taste is any thing rather than pleasant.

The identity of the garden plant with that from Chile having been established, as well as its difference from the Grecian species, it has become necessary to adopt the name G. chilense of M. Balbis, under which it was communicated to Decandolle by that Botanist.

The original state of this species has become a common and universal favourite among cultivators, for the sake of the rich colour of the flowers, and the facility with which it is cultivated in any garden, and in any situation. In its native country we are informed by Mr. Cruikshanks that it grows exclusively by the sides of rivulets, and in situations similar to those of Geum rivale and Comarum palustre in Europe.

But if the plant in the common state is thus deserving of attention, how much more so is the variety now represented, which excels it as much in the size of its flowers, and the brilliancy of its colouring, as G. montanum does G. urbanum. It was sent to the Horticultural Garden from the Botanic Garden, Edinburgh, under the name of G. Quellyon,* and is certainly one of the most striking objects with which we are acquainted. It does not appear to require any particular care, growing as freely, and seeding as abundantly, as the first variety.

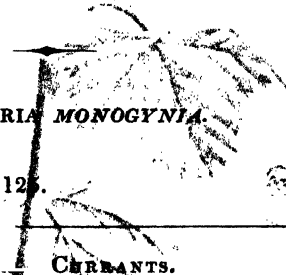
J. L.

* Caryophyllata foliis alatis, flore amplo coccineo, vulgò Quell gon.—*Truillée, p.* 736. *t.* 27.



*RIBES** sanguineum.

Purple-flowered Currant



PENTANDRIA *MONOGYNIA*.

Nat. ord. GROSSULÀCEÆ.
RIBES.—Suprà, vol. 2. fol. 125.

CURRANTS.

R. *sanguineum;* inerme, foliis cordatis subquinquelobis serratis venosis supra glabriusculis subtùs villoso-tomentosis, racemis laxis pubescentibus foliis duplò longioribus, calycibus tubulato-campanulatis: laciniis linearibus obtusis patentibus petala integerrima excedentibus, bracteis obovato-spatulatis, baccis turbinatis hirsutis.—*Douglas in Transactions of the Hort. Soc. vol. 7. p.* 509. *t.* 13.

R. sanguineum. *Pursh fl. am. sept.* 1. 164. *Smith in Rees cyclopædia. Römer et Schultes syst. veg.* 5. 497.

For many years it has been known to Botanists that the district of the Columbia river, on the north-west coast of America, abounds with Currants, remarkable for the great beauty of their flowers. Long since, Ribes aureum was obtained through the United States, and proved, as is well known, fully worthy of the reputation it had acquired by report. The subject of the present plate has been recently introduced by the Horticultural Society, and certainly is inferior in beauty to no plant yet in cultivation. It is as hardy as the common Currant of the Gardens, and bears a vast profusion of bunches of the most lovely purplish-red flowers, during the end of April and beginning of May, remaining in perfection full three weeks.

Increased readily by cuttings, and requiring no particular management; the only points that appear to demand attention being that it should be planted in dry situations, but not in peat soil, as it is apt to go off in swampy places, and peat has been found injurious to it.

* See fol. 1

This species was sent by Mr. Douglas to the Horticultural Society; and of such importance do we consider it to the embellishment of our Gardens, that if the expense incurred by the Horticultural Society in Mr. Douglas's voyage had been attended with no other result than the introduction of this species, there would have been no ground for dissatisfaction. It is not the number of objects that a public body or an individual accomplishes, that creates a claim to public gratitude, so much as their utility; and in this view the gentleman who brought the first live plant of the now common China Rose to England deserves his country's gratitude in a greater degree than all the collectors who sent plants to Kew for the next twenty years. But if we consider that it is not R. sanguineum alone that the Horticultural Society has introduced through the same active traveller, but that the gigantic Pines of North-west America, one of which yields timber superior to the finest larch; Acer macrophyllum, the wood of which is as much better than our Sycamore as the species is superior in the beauty and amplitude of its foliage; Gaultheria Shallon, an evergreen shrub of great merit; have all been secured to this country, and distributed in every direction,—to say nothing of the beautiful Lupines, Pentstemons, Berberries, Œnotheras, and other plants of less moment,—when all this, we say, is considered, it is not too much to assert, that this result alone has justified all the expenditure of the Society's Garden from the commencement, and has stamped it with a character of great national utility, which nothing but future mismanagement can shake.

The following is Mr. Douglas's own account of this plant:—

"This forms an erect, branching bush, exceeding six feet in height, with red smooth branches, the younger twigs covered with short, brown, bristly hairs, which fall away along with the thin deciduous bark of the first year. The leaves are heart-shaped, more than two inches long, one and a half broad, dark green above, hoary and downy beneath, on footstalks of equal length with the leaves, which are more or less pubescent and glandular, having conspicuous ciliated or slightly fringed stipules. *Flower-stalks* about four inches long, lax, more pubescent than the leaves. *Calyx* half an inch long, the tube nearly bell-shaped, short in proportion to the spreading segments, pink or crimson. *Petals* obovate, one-third shorter than the limb, white, becoming of the same colour as the calyx after they have been some days expanded. *Stamens* of the same length as the petals. *Anthers* white. *Style* slightly cloven. *Berry* turbinate, three-eighths of an inch long, brownish black, hairy, having a tough, leathery, thick skin, with numerous small angular seeds, adhering together by a small portion of limpid viscid mucus, and completely destitute of the pulpy substance peculiar to most species of this tribe.

"So long ago as the year 1787, my esteemed friend Archibald Menzies, Esq., during his first voyage round the world, discovered this species near Nootka Sound; and subsequently on his second voyage with the celebrated Vancouver, in 1792, found it again on various points of the coast of North-west America. From that period to 1814, it lay unnoticed in our Herbaria; when the above-quoted author described it, partly from specimens collected in 1805 by the enterprising American travellers Lewis and Clarke, during

their memorable journey; and partly from specimens deposited by Mr. Menzies in the Herbarium of the late Sir Joseph Banks, and that of the British Museum. The species, indeed, inhabits a great range of country; but it is always confined to the mountainous districts of the coast, never extending beyond the influence of the sea breeze, having been found from Point Bodago in 38° to the Straits of Juan de Fuca in 49° abundantly; and, but more sparingly, even as high as 52° north latitude. It usually grows on rocky situations, or on the shingly shores of streams, in partially shaded places. It is the most common of its tribe at 'Point George,' near the confluence of the river Columbia. Whether we consider the delicate tints of its blossoms, which appear in March and April, the elegance of its foliage, the facility with which it is increased and cultivated, or its capability of enduring the severest of our winters without the least protection, it may be regarded as one of the finest and most interesting additions that have been made to our shrubberies for many years. If the bushes were planted in soil having a portion of lime-rubbish mixed with it, the blossoms would certainly be more profuse, and probably also of a deeper tint; a circumstance which I have observed to be the case in the limestone districts of its native woods.

"The Society received seeds of this plant from me in October 1826, which I forwarded across the continent of America. The bushes were planted in open borders in the spring of 1828; and last April they blossomed in great profusion, though scarcely two years old."—*Hort. Trans. vol.* 7. *p.* 509.

The following new species are also described in the same place; but none of them possess the merit of R. sanguineum, being mere Botanical curiosities.

R. *petiolare;* inerme, foliis cordato-trilobis serratis utrinque punctato-glandulosis, petiolis longissimis, racemis erectis elongatis, calycibus planiusculis: laciniis linearibus petala integerrima cuneiformia triplò excedentibus, baccis glabris. —*Douglas.*

Found among coppice wood on the western base of the Rocky Mountains. Fruit of no value.

R. *divaricatum;* ramis divaricatis setosis, aculeis 1-3 axillaribus deflexis, foliis subrotundis 3-lobis inciso-dentatis nervosis glabris, pedunculis 3-floris nutantibus, calyce campanulato: laciniis linearibus reflexis tubo duplò longioribus, stylo staminibusque exsertis, baccis glabris.—*Douglas.*

Common on the banks of streams near Indian villages on the north-west coast of America. Fruit pleasant, as large as a gooseberry.

R. *irriguum;* aculeis axillaribus ternis, foliis cordatis sub-5-lobis dentatis ciliatis utrinque pilosis nervosis, pedunculis 3-floris glanduloso-pilosis, calycibus campanulatis: laciniis linearibus tubum æquantibus, baccis glabris.—*Douglas.*

Native of moist mountain rocks near springs and streams in the north-west of America. Berry described as half an inch in diameter, and very pleasant.

R. *echinatum*; aculeis quinis axillaribus, ramis omninò reclinatis hispidulis, foliis 5-lobis glabris, racemis nutantibus multifloris folio longioribus, pedicellis germinibusque piloso-glandulosis, calycibus campanulatis, bracteis ovatis ciliatis, baccis hirsutis.—*Douglas.*

On dry shelving rocky places on the mountains of northern California. Berries black, pleasant.

J. L.

NOTE *to Senecio lilacinus, fol.* 1342.

Mr. Don has obligingly pointed out to us the place in which Senecio lilacinus has been named. It is described and figured in a little memoir by Dr. Schrader, called "Blumenbachia novum è Loasearum familia genus; adjectis observationibus super nonnullis aliis rarioribus aut minus cognitis plantis," p. 39. t. 4. f. 1. It is a native of the Cape; and in the opinion of Mr. Don must be placed next Senecio venustus, to which it comes nearest in affinity.


a
b
c

LACHENÁLIA* pallida.

Pale-blue-flowered Lachenalia.

HEXANDRIA *MONOGYNIA.*

Nat. ord. ASPHODELEÆ.
LACHENALIA.—Suprà, vol. 4. *fol.* 287.

L. *pallida;* corollis campanulatis, petalis 3 interioribus longioribus, floribus brevissimè pedunculatis horizontalibus, foliis lineari-oblongis scapo longioribus. *Hort. Kew. ed.* 1. 1. 460.

L. pallida. *Thunb. prodr.* 64. *Redouté Liliacées* 22. *Willd. sp. pl.* 2. 172. *Hort. Kew. ed.* 2. 2. 285. *Römer et Schultes syst. veg.* 7. 605.

β. minor; petalis sepalis subæqualibus, racemo paucifloro.

L. pallida *α. Suprà, fol.* 314.

Rachis *angulata, multiflora.* Flores *sessiles, in axilla bracteæ scariosæ.* Calyx *pallidè plumbeo-cæruleus, laciniis petalis multò brevioribus, sub apice viridibus.* Petala *concolora, sed pallidiora.* Folia *atroviridia, immaculata.*

We consider this the type of L. pallida, rather than the smaller variety represented at fol. 314: it agrees better with the descriptions of authors, and is undoubtedly the state from which the definition in the *Hortus Kewensis* was taken, as we know from the inspection of specimens formerly obtained from the Garden at Kew by Mr. James Donn, and now in our possession.

The supposed variety figured at fol. 287, is altogether another species.

Our drawing was made many years ago in the Garden of our late friend, Mr. Griffin, whose fine collection of bulbs is now unfortunately dispersed through so many hands,

* Werner Lachenal, a professor of Botany at Basle, is much better known by the beautiful genus that bears his name than by any trace that he has left in the history of science. He [illegible]

that it is no longer possible to trace the fate of any particular species. In the cultivation of the genus Lachenalia he was particularly successful. No one who ever saw his Garden in the earlier months of spring can have forgotten the beauty of his greenhouses and glazed pits glowing with hundreds of flowers of L. tricolor, quadricolor, and other richly-coloured kinds, intermixed with the lighter and more graceful blossoms of endless varieties of Ixia and Gladiolus.

A Cape bulb, very easily cultivated in a pit from which frost is excluded.

J. L.



PHLOX* speciósa.

Shewy Phlox.

PENTANDRIA *MONOGYNIA.*

Nat. ord. POLEMONIACEÆ.
PHLOX.—Suprà, vol. 1. *fol.* 68.

P. *speciosa;* erecta, ramosa, frutescens, glabra, foliis linearibus acuminatis pungentibus basi dilatatis subciliatis margine callosis: supremis alternis, floribus corymbosis, sepalis acuminatis margine membranaceis tubo corollæ subæqualibus, laciniis corollæ cuneato-oblongis integris.

P. speciosa. *Pursh fl. am. sept.* 1. 149. *Römer et Schultes syst. veg.* 4. 364. *Spreng. syst.* 1. 624.

Fruticulus pedalis, erectus, ramosus, dumosus, glaber nisi ad marginem baseos foliorum, necnon sepalorum. Folia *linearia, acuminata, pungentia, tactu scabra, margine callosa, undè quasi tricostata: costis duabus marginalibus; folia superiora alterna.* Flores *carnei, in ramulis terminales, corymbosi.* Sepala *à basi lata membranacea, acuminata, tubi corollæ longitudine, æqualia, costata, intùs tomentosa.* Corolla *hypocrateriformis, glabra, laciniis limbi planis, cuneato-oblongis, integris.*

This rare plant was originally described by Pursh, from specimens in Lewis's Herbarium, collected upon the plains of the Columbia. It was afterwards discovered by Mr. Douglas in abundance upon the dry lands of the same district; and from seeds collected by that traveller the solitary individual from which this figure was taken was raised in the Garden of the Horticultural Society. It is extremely impatient of cultivation. The late incessant rains have nearly destroyed it; and it is to be feared that it will be soon lost altogether.

* The φλὸξ of Theophrastus, the Agrostemma coronaria of moderns, was so called on account of the flame colour of its corolla. The word itself signifies fire.

Pursh describes his plant with a pink or purple eye, like that of Vinca rosea. There was, however, no appearance of this upon the plant that flowered in the Garden; nor is it discoverable upon Mr. Douglas's wild specimens.

P. speciosa is nearly related to the rare P. sibirica, a Dahurian plant, which has never found its way to our Gardens, and which is known by the hairiness of its leaves and stems. There are also two or three other subulate-leaved species, resembling P. Hoodii, all natives of the same part of America, to which P. speciosa bears much resemblance, but from which it is very distinct.

A small shrub, about a foot high, erect, branched, bushy, smooth, except at the edge of the base of the leaves and sepals. *Leaves* linear, acuminate, pungent, rough to the touch, callous at the edge, whence they have the appearance of having three ribs, two of which are marginal; the upper leaves alternate. *Flowers* flesh-coloured, terminal upon the little branches, corymbose. *Sepals* with a broad membranous base, acuminate, the length of the tube of the corolla, equal, ribbed, downy inside. *Corolla* hypocrateriform, smooth; the segments of the limb plane, cuneate-oblong, entire.

J. L.



ACÁCIA lunáta.

Crescent-leaved Acacia.

POLYGAMIA *MONŒCIA.*

Nat. ord. LEGUMINOSÆ. § *Mimoseæ.*
ACACIA.—Suprà, vol. 2. *fol.* 98.

Sect. 1. Foliis deformatis, nempè: foliolis sæpiùs, præsertim in planta adulta, abortivis, petiolis dilatatis in Phyllodia mutatis.—*Dec. prodr.* 2. 448.
§ 2. Capitato-racemosæ, *floribus nempè in capitula globosa collectis, capitulis secùs pedunculum axillarem racemosis. Stipulæ omnium subnullæ aut inermes.*—Dec. l. c.

A. *lunata;* phyllodiis dimidiato-oblongis obtusis cuspidatis glaucis subfalcatis infrà medium ad latus convexius glandulosis, ramisque glabris, racemis phyllodio longioribus.

A. lunata. *Sieber herb. N. Holl. n.* 461. sec *Dec. prodr.* 2. 452. *Lodd. bot. cab.* 384. *Sweet's flora australasica* 42.

A. brevifolia. *Lodd. bot. cab.* 1235.

Rami *virgati, angulati, glabri.* Phyllodia *oblonga, obtusa, cuspidata, in petiolo attenuata, valdè glauca, glabra, marginata, subfalcata, glandulâ parvâ in marginem anteriorem infra medium.* Capitula 5 *v.* 6, *racemosa.* Flores *lutei, odorati.*

This is said to be a very variable species; and such it appears to be, if we are to judge from the figures that have been published of it, no two of which represent exactly the same state. Mr. Sweet is no doubt right in identifying A. brevifolia and lunata; and we suspect there would be no great inaccuracy in advancing a step further by uniting both with A. myrtifolia. Their glaucous colour and more falcate leaves seem their principal characteristic.

A native of Van Diemen's Island, flowering in April, May, and June, thriving wherever it is protected from frost, and propagated by cuttings. Our drawing was made in

* See fol. 1317.

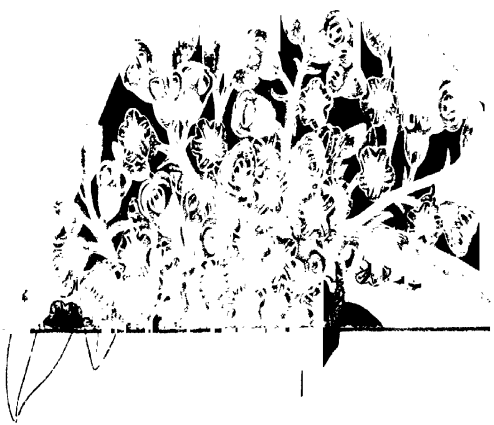
Mr. Colvill's Nursery many years since. The flowers are very fragrant.

Branches weak, spreading, angular, smooth. *Phyllodia* oblong, obtuse, cuspidate, tapering into the petiole, very glaucous, smooth, margined, somewhat falcate, with a small gland on the inner edge below the middle. *Flowers* yellow, almond-scented, in heads of 5 or 6 in each raceme.

J. L.

NOTE *to Collomia heterophylla, fol.* 1347.

We find we have been anticipated in the comparison drawn between the spiral fibres of the testa of Collomia and the coma upon the seeds of Asclepiadeæ and other plants. Mr. Don has pointed out some remarks by him in Jameson's Journal for January 1829, in which the same opinion is expressed. We had no doubt read this at the time of its appearance and afterwards forgotten it, or we should not have failed to acknowledge the priority of the observation, which, by the way, probably escaped our recollection in consequence of being mixed up with some remarks upon true spiral vessels generally, in which we are less disposed to concur.



STERCŪLIA* Tragacantha.

The Sierra Leone Tragacanth Tree.

POLYGAMIA *MONŒCIA.*

Nat. ord. STERCULIACEÆ.
STERCULIA.—Suprà, vol. 3. *fol.* 185.

S. *Tragacantha;* foliis oblongis cuspidatis integerrimis v. apice trifidis subtùs tomentosis, paniculis axillaribus coarctatis tomentosis, calycis laciniis apice cohærentibus.
S. Tragacantha. *Lindley's introduction to the natural system of botany, p.* 39. *ined.*
Arbor 40? *pedes altitudine, ramulis ferrugineis tomentosis.* Folia *alterna, petiolata, oblonga, cuspidata, sæpiùs utrinque rotundata, integerrima, nunc apice leviter trifida v. bifida, suprà glabra, subtùs cum petiolo tomentosa; tomentum è pilis stellatis.* Paniculæ *densè tomentosæ, coarctatæ, axillares, nunc foliis breviores, nunc longiores.* Calyx *campanulatus, tomentosus, rufopurpureus, 5-fidus, laciniis apice cohærentibus.* Stamina *generis.* Pistillum *haud vidi.*

Our drawing of this species was taken in the Hothouse of the Comte de Vandes' Garden at Bayswater, in which it flowered in May last. It is a native of Sierra Leone, where it is known as the Tragacanth tree; a gum resembling Gum Tragacanth being copiously exuded by it when wounded. The panicles of flowers are more contracted and shorter in the garden specimen than in our wild ones from Dr. Barry, and they have a tendency to become lobed at the apex: from the latter circumstance it is not improbable that the tree occasionally produces lobed leaves.

We have specimens of a plant very nearly the same as this, gathered in Sierra Leone by Mr. George Don, and marked "a tree 40 feet high." Its panicles are much larger and looser, its flowers more funnel-shaped, and their segments without any tendency to cohere at the apex. We, however, dare not decide whether it is a mere variety, or a distinct species.

* See fol. 1256

No other Sterculia has been remarked to produce such a gum as that collected from this tree; but it is probable that many others would yield the same substance, as it seems nothing more than the concrete state of the mucilage, which is so universal in the order, and which is one of the signs of affinity between Sterculiaceæ and Malvaceæ.

Besides its use as a medicinal plant, this species has no particular claim to interest the cultivator, its flowers being far from ornamental, and the foliage being very inferior in beauty to the more common Sterculia Balanghas. It will always require the heat of the stove, where it may be increased, we presume without difficulty, by cuttings.

Branchlets downy, ferruginous. *Leaves* alternate, petiolate, oblong, cuspidate, generally rounded at each end, quite entire, except at the apex, which is sometimes bifid or trifid, smooth upon the upper surface, downy on the under, and upon the petiole; the down is formed of stellate hairs. *Panicles* densely downy, contracted, axillary, either shorter or longer than the leaves. *Calyx* campanulate, downy, brownish purple, 5-cleft, the segments cohering at the apex. *Stamens* those of the genus. *Pistilla* not seen.

J. L.

NOTE.

Since the foregoing matter was sent to press, we have received an early copy of the new *Hortus Britannicus* of Mr. Loudon, in which we find, p. 392, a Sterculia, mentioned under the name of *pubescens* of Mr. George Don, which is described as a native of Guinea, forming an evergreen tree, 20 feet high. Possibly this may be the same as S. Tragacantha; but its flowers are said to be white, and the period of its introduction 1793. The want of description prevents our ascertaining whether this conjecture is well founded or not; but we think it right to advert to the name. At the same time we may take the present opportunity of expressing our admiration of the manner in which the very extraordinary Catalogue now referred to has been executed. The number of species admitted into it amounts to 28,565, exclusive of varieties. This, after deducting the flowerless British species, amounting to 2663, is a much more extensive list than any that has yet appeared. But it is not on account of the number of its species that it deserves attention,—as this is a subject upon which some difference of opinion may exist,—it is the beauty of its type, the excellent arrangement of its matter, the vast quantity of useful gardening information that it contains, and the careful application of the soundest principles of orthography and etymology to the accentuation and termination of the systematic names, that give it a claim to be considered a classical work in the literature of gardening. Its perfection in the latter respect is due to Mr. Alexander Rowan, whose labour merits the grateful acknowledgment of all readers, and will be found not less useful to the Botanist, who is too apt to overlook such points, than to the Gardener, to whom an accurate guide for writing and speaking a language, of which he cannot be expected to possess a critical knowledge, is invaluable. It would have been perhaps better, and more conformable to the present state of science, as the Linnean and Natural system of Botany are both introduced, if the former had been made subordinate to the latter. We can, however, appreciate, and at the same time admit, the force of the motives that have induced the editor to adopt an opposite plan, which is, after all, of less importance, as there is already a very useful and recent Catalogue by Mr. Sweet, arranged upon the Natural



VACCINIUM* ovátum.

Ovate-leaved Bilberry.

OCTANDRIA OR DECANDRIA *MONOGYNIA.*

Nat. ord. VACCINIEÆ.
VACCINIUM.—Suprà, vol. 4. *fol.* 302.

V. *ovatum;* ramulis hirtis, foliis sempervirentibus ovatis coriaceis lucidis serratis glabris margine revolutis, racemis brevibus axillaribus deflexis, corollis subglobosis 5-dentatis, calycinis dentibus acutis.
V. ovatum. *Pursh fl. am. sept.* 1. 290. *Spreng. syst.* 2. 212.
Frutex *densè foliosus, sempervirens, pedalis v. bipedalis, ramulis hirtis patentibus, v. recurvis.* Folia *coriacea, lucida, ovata, acuta, serrata, subdisticha, breviter petiolata, utrinque glaberrima; petiolis pubescentibus.* Racemi *foliis breviores, deflexi, sub foliis latentes, glabriusculi, bracteis brevibus, ovatis, cucullatis.* Ovarium *subrotundum, glabrum;* calycis *dentes breves, acutæ, rubræ.* Corolla *subglobosa, carnea, 5-dentata; dentibus brevibus, acutis, medio sanguineis.* Baccæ *pisi magnitudine.*

A native of the north-west of America, whence it was sent to the Horticultural Society. It is a hardy handsome evergreen shrub, flowering in March and April.

The figure represents the state of the plant when about

* The lexicographers say this word is of unknown meaning. It is not mentioned by Pliny, but is familiar to the classical reader by its occurrence in the Eclogues of Virgil. It is supposed by some that Virgil's Vaccinia nigra were the flowers of Delphinium Ajacis, a plant which has been conjectured to be the ὑακίνθος of the Greeks; and hence it has been thought that Vaccinium itself was nothing more than a Latin alteration of Hyacinthus or Vacinthus. But it is most probable that the Hyacinthus of the poets was Gladiolus communis, on the flowers of which Ai Ai is distinctly marked; and then the term Vaccinia *nigra* could not be applied to the Hyacinthus, if it were to Delphinium, as seems really to have been the intention of Virgil, who was no doubt speaking of flowers, and not of fruit, when he wrote

"Alba ligustra cadunt, Vaccinia nigra leguntur."

two years old from seed; but it appears from Mr. Douglas's wild specimens that it becomes a bush, at least two feet high, with more upright and stronger shoots, bearing a vast quantity of pink flowers, which, as in many other Vacciniums, are hidden from view by the leaves, in consequence of the latter assuming a sort of distichous direction presenting their surfaces horizontally to the light, notwithstanding the horizontal direction of the branches; a circumstance which is in strict accordance with the laws of vegetable physiology, but which completely destroys any beauty that the plants would derive from their flowers.

To be propagated by layers like the rest of the genus. It requires to be cultivated in shady places, or among bushes; but, while it is much injured by exposure to the uninterrupted rays of the sun, it suffers equally from a total absence of direct solar light; so that it will not thrive under a north wall.

A shrub, covered densely with foliage, evergreen, a foot or a foot and a half high; the branchlets hairy, spreading, or recurved. *Leaves* coriaceous, shining, ovate, acute, serrated, somewhat distichous, on short stalks, quite smooth on each side; the petioles pubescent. *Racemes* shorter than the leaves, deflexed, hidden beneath the foliage, nearly smooth; the bracteæ short, ovate, cucullate. *Ovarium* roundish, smooth; teeth of the calyx short, acute, red. *Corolla* nearly globose, flesh-coloured, 5-toothed; the teeth short, acute, crimson in the middle. *Berries* the size of a pea.

J. L.



SCILLA* plumbea.

Lead-coloured Scilla.

HEXANDRIA

Nat. ord. ASPHODELEÆ.

SCILLA.—Perianthium hexaphyllum, patens, æquale, deciduum (cæruleum). *Stamina* æqualia, subperigyna. *Stylus* filiformis, intrusus. *Capsula* subrotunda, 4-polysperma, seminibus subglobosis.

S. *plumbea;* foliis ligulæformibus planis recurvis, scapo erecto tereti pauciflоro, pedicellis bracteis triplò longioribus, laciniis perianthii ovatis carnosis demùm reflexis pedicellis duplò brevioribus.

We only know this plant from a drawing made in 1813, in the Kew Garden, by the late Mr. Sydenham Edwards. The bulb had been imported from the Cape. We have long hoped to discover it in some of the rich collections near London; but after an unsuccessful search we are constrained to publish it, in the hope that others may be more successful.

It seems to be a genuine Scilla, as far as it is possible to discover any character of distinction between that genus and Ornithogalum, which we may take this occasion to observe, are like a great many other Linnean genera, separated upon account of differences, much more trifling than such as modern Botany usually recognises; in fact

* The σκίλλη of Hippocrates and Dioscorides appears to have been the plant now called Scilla maritima, and is of unknown derivation, unless it is to be traced to the Arabic *âsqyl*, which is the same plant, according to Golius, as cited by De Théis. Some persons think the name originated in the verb σκύλλω, to torment; on account of the emetic, or even poisonous properties of the original species when eaten. But this etymology is perhaps overstrained.

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they are known, as the late President of the Linnean Society has somewhere remarked, by the colour of their flowers rather than by any decided peculiarity of organisation. The natural colour of Ornithogalum flowers is white or yellow, and that of Scilla blue or rose.

J. L.



SALVIA* fulgens.

The Cardinal Sage.

DIANDRIA *MONOGYNIA.*

Nat. ord. LABIATÆ *Jussieu.* (*Lindley's introduction to the natural system, p.* 239.) *Tribe* 5. Nepeteæ *Benth. Suprà, vol.* 15. *fol.* 1289.

SALVIA Linn.— *Calyx* bilabiatus, labio superiore integro v. 3-dentato, inferiori bifido. *Corolla* bilabiata, labio superiori erecto fornicato v. falcato, inferiori patente trifido. *Stamina* fertilia 2, sub labio superiori ascendentia. *Filamenta* brevissima, tubo inclusa. *Antheræ* dimidiatæ; connectivo elongato filiformi incurvo, posticè sæpiùs clavato, rarius antheræ loculum alterum gerente. *Stylus* apice bifidus, lobo superiore sæpiùs breviore. *Achenia* sicca.—*Bentham, suprà, vol.* 15. *fol.* 1292.

S. *fulgens;* caule herbaceo erecto ramoso hirto, foliis ovatis acuminatis cordatis serratis suprà pilosiusculis subtùs pubescentibus, verticillis 4-6-floris distantibus, calycibus pilosiusculis, corollis elongatis.—*Kunth synops.* 2. 79.

S. fulgens. *Cav. ic. pl.* 1. *t.* 23. *Vahl enum.* 1. 237. *Willd. sp. pl.* 1. 140. *Römer et Schultes* 1. 231. *Spreng. syst.* 1. 61.

S. cardinalis. *Humb. Bonpl. et Kunth n. gen. et sp. plant.* 2. 301. *t.* 152. *Römer et Schultes,* 7. 194. *Spreng. syst. veg.* 1. 62.

Caulis 3-*pedalis, pilosus, angulis rotundatis, ad basin petiolorum bicallosus.* Folia *rugosa, cordata, ovata, crenata, pilosa, longipedunculata.* Racemi *terminales, primùm nutantes, bracteis maximis, ovatis, acuminatis, concavis, deciduis inclusi.* Verticillastri *triflori.* Calyx *pubescens, coloratus, striatus, bilabiatus, labio superiore integro subrecurvo, inferiore paulò majore, bifido, recto.* Corolla *intensè coccinea, ventricosa, calyce triplò major, galeâ inflatâ villosâ marginibus inflexis, labio galeæ subæquali, glabro, trilobo; lobis replicatis, lateralibus ovatis, intermedio truncato.* Stamina *duo, rudimentis duobus minimis subulatis;* filamenta *brevia;* antheræ *lobus fertilis connectivo recto subulato, sterili æquilongo deflexo spatulato piloso; horum ope pilorum stamina cohærent.* Ovaria *glabra, minima, disco insidentia, dente maximo antico carnoso.* Stylus *apice villosus.* Stigma *inæquale, bilobum.*

The first knowledge we gained of this splendid herbaceous plant was from a specimen that flourished in July last in the Garden of the Horticultural Society, having

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* See fol. 1205

been raised, in 1829, from seed collected on the mountains of Mexico by —— Graham, Esq., a gentleman who has enriched our Gardens with several fine things, and who has formed a most interesting herbarium of Mexican mountain plants. About the same time, a plant that had been communicated by Mr. H. Silverlock, nurseryman, Chichester, produced its blossoms in the same collection. Notwithstanding the unfavourable summer we have just experienced, a summer so cold that the natives of milder climates have scarcely been able to support a feeble existence, and in which the common Salvia splendens has not produced a single flower, this species has displayed its nodding heads of dazzling scarlet in all their native beauty. On this account the Cardinal Sage may be expected to prove a most valuable addition to our autumnal flowers; for if it succeeds thus well in a summer almost unparalleled for cold, wet, and gloom, what may not be hoped from it in a more genial season? It grows about 3 feet high, and strikes freely from cuttings.

The constitutional difference between Salvia splendens and fulgens is, no doubt, due to the very dissimilar localities they naturally occupy. While the former is a native of Brazil, the latter grows abundantly in cold situations between Tolucca and Tianguillo, at an elevation of between nine and ten thousand feet above the sea. Hence, if due allowance is made for the decrement of caloric as we rise in the atmosphere, the station of S. fulgens, although geographically about 20° from the equator, is, in point of climate, the same as that of Virginia. It is therefore probable that it will prove capable even of bearing our winters without protection, which would be an excellent quality; but we are not aware that any person has at present direct experience upon the subject.

Mr. Graham's wild specimens have the leaves either nearly green beneath, or densely covered with white down; hence it is not impossible that the S. pulchella of Decandolle may be, as Steudel suspects, the same thing.

Forty years ago this was cultivated in the Gardens of Madrid, and yet it has at last found its way to England from the New World before it has reached us from Spain! Cavanilles called it by the name here adopted; and we are obliged, on that account, to abandon the more recent

but better name of S. Cardinalis, by which it was described by M. Kunth.

The *stem* is about 3 feet high, hairy, with rounded angles, and two callosities at the base of the petiole. *Leaves* rugose, cordate, ovate, crenated, hairy, on long stalks. *Racemes* terminal, at first nodding, enclosed within very large ovate, acuminate, concave, deciduous bracteæ. *Verticillastri* 3-flowered. *Calyx* downy, coloured, striated, 2-lipped, the upper lip entire, somewhat recurved, the lower rather larger, bifid, straight. *Corolla* deep scarlet, ventricose, three times as large as the calyx; the helmet inflated, villous, with inflected margins; the lip nearly equal to the helmet, smooth, 3-lobed; the lobes folded back, the lateral ones ovate, with the intermediate one truncate. *Stamens* 2, with very small subulate rudiments of two others. *Filaments* short; fertile lobe of the anther with a straight subulate connectivum; sterile of the same length, deflexed, spatulate, pilose; it is by the aid of these hairs that the stamens cohere. *Ovaria* smooth, very small, seated on a disk with a very large anterior fleshy tooth. *Style* villous at the end. *Stigma* unequal, 2-lobed.

J. L.



TILLANDSIA* rósea.

Pink-headed Tillandsia.

HEXANDRIA *MONOGYNIA.*

Nat. ord. BROMELIACEÆ *Jussieu.* (*Lindley's introduction to the natural system of botany, p.* 256.)
TILLANDSIA.—Suprà, vol. 2. *fol.* 105.

T. *rosea;* foliis ligulatis acuminatis furfuraceis patentibus, spicâ ovatâ solitariâ foliis vix longiore, bracteis ovatis concavis.

Our drawing of this undescribed species of Tillandsia was made some years since, from a plant in the possession of the Marchioness of Bath. It flowered in the month of May, but having afforded only a single specimen, we had not an opportunity of examining it in detail. It is, however, distinguished sufficiently by its ovate head of flowers scarcely higher than the leaves, and bright pink bracteæ.

A native of

In the second edition of Sweet's *Hortus Britannicus*, which is just published, we find the names of five Tillandsias, with which we are unacquainted; but this can scarcely be one of them, as they are all stated to be natives of the West Indies, and none of the names are applicable to the species now represented. In the last Number of this publication we observed, in speaking of Mr. Loudon's *Hortus Britannicus*, that whatever inconvenience the public might experience from the Linnean arrangement of that work, would be remedied by consulting Mr. Sweet's Catalogue, which is arranged upon the Natural System. At that time we were not aware that the new Catalogue, by the same author, to which we have just referred, was upon the eve of

publication. We have since examined it, and find it a decided improvement upon the first edition; the paper and printing are better, the colour of the flowers and many useful signs indicating general characters of growth have been added throughout; it contains nearly two hundred pages more than before; and, as far as we can ascertain, by taking an average of the pages, it comprehends about 34,000 species and varieties.

J. L.



CANNA* Achíras.

Mendoza Canna.

MONANDRIA *MONOGYNIA.*

Nat. ord. MARANTACEÆ *R. Br.*—(*Introduction to the natural system of botany, p.* 267.)
CANNA.—Suprà, vol. 7. t. 576.

C. *Achiras;* perianthii exterioris foliolis interioribus tribus lanceolatis acuminatis inæqualibus; interioris triphylli foliolis 2 superioribus maximè inæqualibus cum inferiore (labello) oblongo recurvato integerrimis, foliis ovato-oblongis abruptè acuminatis, caule lanuginoso.—*D. Don in litt.*
Canna Achiras. *Gillies MSS. sec. cl. Don.*

The specimen from which this figure was taken was communicated in August last by Mr. Lambert. Mr. Don, who is well acquainted with it, has obliged us with his specific character, and the following memoranda. Mr. Lambert remarks, that it is the hardiest Canna he has ever cultivated.

"A native of Mendoza, and was raised last year from seeds communicated by Dr. Gillies, who considers it a new species, and calls it *Canna Achiras.* It is closely allied to *Canna lanuginosa* Rosc. t. 16, which comes from Maranham; but in that, as appears from the figure, the leaves are much narrower and lanceolate; the intermediate series of the perianth nearly equal, and the two upper foliola of the inner series emarginate. In C. *lanuginosa* the flowers are also of a more uniform colour, and the intermediate series of the perianth of a deep red.

* See fol. 1231. Achiras is, we presume, the name by which the species is known in Mendoza.

" *Stem* from 4 to 5 feet high, clothed, particularly in the young state, with a deciduous woolly down. *Leaves* oblong-ovate, abruptly acuminate; the lower ones a foot or more in length, and six inches broad; the uppermost more ovate, seven to eight inches long and four broad. *Flowers* mostly in pairs, on short peduncles. *Bracts* broadly elliptical, concave, rounded at the top, membranous, deciduous."

J. L.

NOTE *to fol.* 1311.

Mr. Don informs us, that he is now convinced that Canna lagunensis is distinct from C. pallida of Roscoe. He finds the lip of C. lagunensis uniformly entire, while that of C. pallida is deeply notched.—*See note to fol.* 1323.



*RIBES** divaricátum.

Straggling Gooseberry.



PENTANDRIA *MONOGYNIA.*

Nat. ord. GROSSULACEÆ *Dec.* (*Lindley's introduction to the natural system, p.* 54.)
RIBES.—Suprà, vol. 2. *fol.* 125.

** ARMATA. Gooseberries.

R. *divaricatum ;* ramis divaricatis setosis, aculeis 1-3 axillaribus deflexis, foliis subrotundis trilobis inciso-dentatis nervosis glabris, pedunculis trifloris nutantibus, calyce campanulato : laciniis linearibus reflexis tubo duplò longioribus, stylo staminibusque exsertis, baccis glabris.—*Douglas in hort. trans. vol.* 7. *p.* 515. *Bot. reg.* 1349, *in textu.*

" A robust bush, of erect habit, six or eight feet high, with divaricated branches, the younger ones sparingly and unequally clothed with minute, bristle-shaped prickles, and having one or three, large, strong, deflexed prickles under each bud. The leaves are rounded, 3-lobed, coarsely cut, toothed, smooth, and veiny, about an inch long ; the footstalks somewhat shorter, with a few scattered hairs near their base. The clusters droop below the branches, are 3- or 5-flowered, shorter than the leaves, slender and smooth, with rounded, subamplexicaul bracteæ. The *calyx* is bell-shaped, yellowish-green, with linear, brownish red, reflected segments, which are double the length of the tube. *Petals* wedge-shaped, white, half the length of the limb. The *stamens* are exserted beyond the calyx, half an inch long. *Style* considerably longer than the stamens, semi-bifid, spreading, villous. *Berry* spherical, smooth, one-third of an inch in diameter, black, pleasant to the taste."

See fol. 1237.

"A common bush on the banks of streams, near Indian villages, on the north-west coast of America, from 45° to 52° north latitude.

"This species flowered last April in the Horticultural Society's Garden. It ranks systematically next R. triflorum of Willdenow."—*Douglas in Hort. Trans.* 7. 515.

To this account by Mr. Douglas, we have only to add, that it proves a hardy shrub, and increases freely by cuttings.

J. L.



SPARAXIS* pendula.

Pendulous-flowered Sparaxis.

TRIANDRIA *MONOGYNIA.*

Nat. ord. IRIDEÆ *Juss.* (*Lindley's introduction to the natural system, p.* 260.)

SPARAXIS Ker.—*Suprà, vol.* 3. *fol.* 258.

S. *pendula*; foliis linearibus strictis scapo polystachyo duplò brevioribus, spicis pendulis multifloris.

Iria pendula. *Thunb. diss. no.* 16. *Prodr.* 9. *Flor. cap.* 1. 286. *Linn. suppl.* 91. *Willd. sp. pl.* 1. 204. *Vahl enum.* 2. 66. *Römer et Schultes syst. veg.* 1. 392. *Spreng. syst. veg.* 1. 156.

Watsonia palustris. *Persoon synops.* 45.

Sparaxis pendula. *Ker in bot. mag.* 1482 (*in textu*). *Botan. reg. v.* 3. *append. Spreng. syst. veg.* 1. 149. *Ker genera Irid.* 92.

Herba *rigida, perennis, cæspitosa,* foliis *linearibus, acutis, strictis, 3-pedalibus, scapis brevioribus.* Scapi *graciles, erecti, apice penduli, polystachyi;* spicæ *pedunculis capillaribus insidentes, pendulæ, secundæ, 6-7-floræ, foliis binis capillaribus ad basin pedunculi cujusvis.* Flores *secundi, lilacini, venosi, intrà bracteas* (*v. spathas*) *membranaceas, convolutas, sublaceras, sessiles.* Perianthium *sexpartitum, sepalis petalisque conformibus, oblongis, obtusis, sub sole patentibus.* Antheræ *lineares, atro-purpureæ.* Capsula *trilocularis, trivalvis, loculicida, seminibus duobus subrotundis brunneis in utroque loculo.*

A native of the Cape of Good Hope, whence it was introduced a year or two ago by Mr. Tate. Thunberg found it growing in wet situations near Kramrivier, with scapes six feet high. In Mr. Herbert's Conservatory, where it blossomed in June last, for the first time in England, the flowering stems were four feet high, and the length of the full-grown leaves three feet.

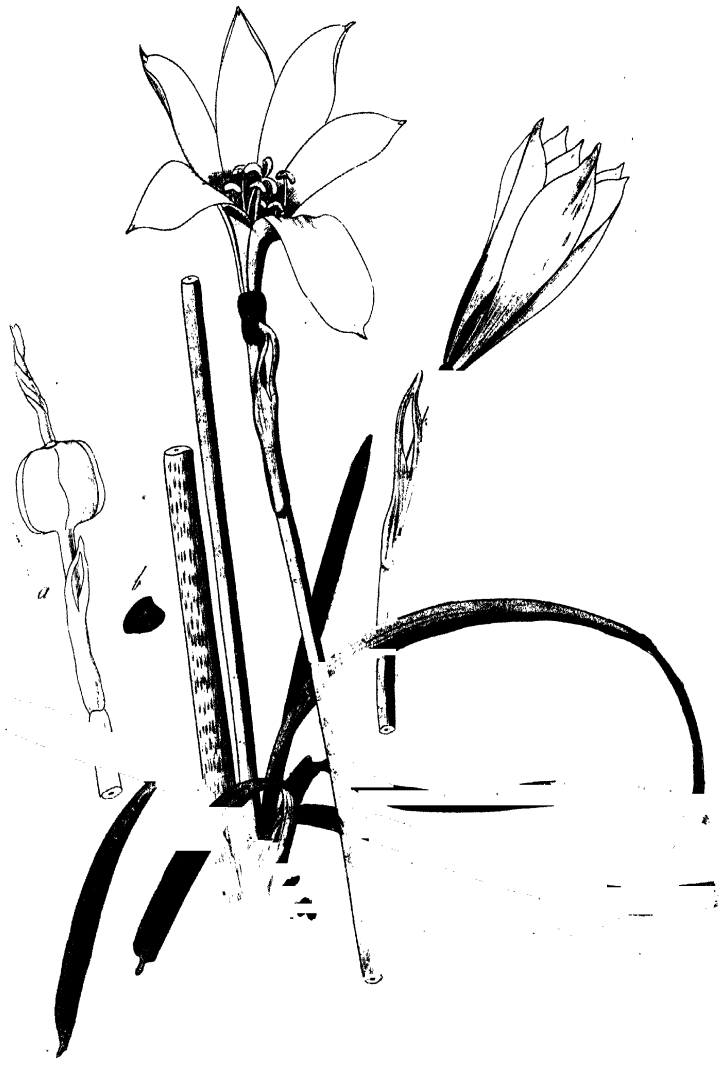
* From σπαράσσω, to tear. The generic distinction consists in the lacerated spathas.—*Loudon's Encycl. of Plants, p.* 41.

Propagated either by division of the root, or by seed, which it ripens in this country. A handsome conservatory plant, well worth cultivation.

According to Thunberg the flowers are pink (incarnati); with us they are lilac.

A rigid, perennial, cæspitose, herbaceous plant, with linear, acute, straight leaves, shorter than the scapes. *Scapes* erect, slender, pendulous at the end, and divided into several branches. *Spikes* placed upon capillary peduncles, pendulous, 1-sided, 6-7-flowered, with two capillary leaves at the base of each peduncle. *Flowers* 1-sided, lilac, veiny, sessile, within membranous, convolute, somewhat lacerated spathes. *Perianthium* 6-parted, the sepals and petals both of the same figure, oblong, obtuse, spreading open in the sun. *Anthers* linear, dark purple. *Capsule* 3-celled, 3-valved, loculicidal, with two roundish brown seeds in each cell.

J. L.



ZEPHYRANTHES* mesochlóa.

Half-green Zephyranthes.

HEXANDRIA *MONOGYNIA.*

Nat. ord. AMARYLLIDEÆ *R. Br.* (*Lindley's introduction to the natural system, p.* 259.)
ZEPHYRANTHES.—Suprà, vol. 10. *fol.* 821.

Z. *mesochloa;* bulbo ovato nigricante; foliis 8-9 viridibus duriusculis canaliculatis acutis; scapo 7 unciali viridi (in seminando versùs basin plus duplò crassiore, rubro minutè maculato) pedunculo circiter unciali; spathâ apice fenestratâ vel divisâ; corollâ 1¾ unciali infrà viridi suprà albâ extùs rubro notatâ; tubo brevissimo fauce lævi; laciniis externis semunciam latis, internis angustioribus; stylo corollâ unciam breviore; filamentis internis stylum ferè adæquantibus, externis brevioribus; stigmate albo amplo trilobo.—*Herbert's MSS.*
Var. α. spathâ fenestratâ.
Var. β. pedunculo breviore, corollâ vix rubro notatâ.
Var. γ. spathâ apice divisâ, corollâ aliquantulum flavescente.
Z. mesochloa. *Herbert. Suprà, fol.* 1345, *in textu.*

"This species of Zephyranthes was sent to Mr. Mackay, Nurseryman of Clapton, by his collector Mr. Anderson, in company with Habranthus Andersoni, from the neighbourhood of Buenos Ayres. It produced three successive scapes in June and July, in the Greenhouse at Spofforth, and ripened its seed. A variety shorter in the peduncle and corolla, and scarcely stained with red; and another with the point of the spathe divided, and the flower tending a little more to greenish yellow, produced a like number

* We are not aware that Mr. Herbert has any where explained the meaning of this name. It is evidently derived from Ζέφυρος, the west wind, and ἄνθος, a flower; and was possibly so called because all the species are natives of western countries.

of successive scapes, and seed also. Habranthus Andersoni flowers and seeds not less abundantly.

"*Bulb* ovate, blackish. *Leaves* 8 or 9, green, $\frac{1}{4}$th of an inch wide, hardish, channelled, acute. *Scape* about seven inches long, while the seed is ripening becoming more than twice as thick as before towards the base, speckled with minute short red streaks, and longer. *Peduncle* an inch long. *Spathe* a little longer, either looped at the end, or divided at the point. *Corolla* about an inch and $\frac{3}{4}$ths long, the lower half green, the upper white, stained on the outside with red; the outer petals half an inch wide, the inner narrower; the *style* an inch shorter than the limb; the *stigma* white, large, deeply 3-lobed; the outer filaments nearly as long as the style, the inner shorter; the mouth of the tube smooth. The variety with the point of the spathe divided has the peduncle longer."

For the drawing and information relating to this new species we are indebted to the Hon. and Rev. W. Herbert, by whom they were obligingly communicated in August last.

J. L.



MALVA* purpurata.

Purple Mallow.

MONADELPHIA *POLYANDRIA.*

Nat. ord. MALVACEÆ *Juss.* (*Lindley's introduction to the natural system, p.* 33.)

1.—*Suprà, vol.* 4. *fol.*

§ 1. MALVASTRUM. Carpella unilocularia monosperma. *Dec.*

* Bismalvæ; *floribus purpurascentibus aut albis, pedicellis axillaribus solitariis unifloris, involucro triphyllo, foliis multipartitis, caule herbaceo.*—Dec. prodr. 1. 432.

M. *purpurata;* pubescens, ascendens, foliis inferioribus 5-fidis superioribus trifidis: laciniis sæpiùs trifidis lobis furcatis obtusis, floribus solitariis, pedunculis petiolis longioribus.

Herba *perennis, ascendens, ramis diffusis intricatis circulum diametro* 2-*pedali efformantibus.* Rami *pubescentes.* Folia *pubescentia, inferiora* 5-*partita, superiora* 3-*partita, laciniis subtrilobis: lobis divaricatim subbilobis.* Flores *solitarii, axillares, pedunculo petiolo sæpiùs longiore.* Involucrum *ferè obsoletum, è tribus setis deciduis constans.* Calyx *tomentosus, campanulatus,* 5-*fidus, laciniis acutis.* Petala *purpurea, cuneata, calyce longiora.* Carpella *monosperma, indehiscentia, inappendiculata, pubescentia.*

Raised in 1826, in the Garden of the Horticultural Society, from seeds collected by Mr. M'Rae in the Cumbre, a pass in the Chilian Andes, in November 1825. In this country it is a hardy perennial, increasing very little by the root, but producing seeds in dry seasons. It flowers in June, and continues in beauty till the frosts of autumn nip it. It requires no particular attention, thriving in any common garden soil.

A perennial herbaceous plant, forming a patch about two feet in diameter by its prostrate or ascending entangled

* An alteration of μαλάχη, the Greek name of the Mallow.

branches. *Branches* pubescent. *Leaves* downy, the lower 5-parted, the upper 3-parted; the segments 3-lobed, with divaricate, somewhat 2-lobed divisions. *Flowers* solitary, axillary, their peduncle generally longer than the petiole. *Involucrum* nearly obsolete, consisting of three deciduous bristles. *Calyx* downy, campanulate, 5-cleft, with acute segments. *Petals* purple, cuneate, longer than the calyx. *Carpella* one-seeded, indehiscent, without appendages, pubescent.

J. L.



BANKSIA* littorális.

Shore Banksia.

TETRANDRIA *MONOGYNIA.*

Nat. ord. PROTEACEÆ *Jussieu.* (*Introduction to the natural system of botany, p.* 68.)
BANKSIA.—Suprà, vol. 16. *fol.* 1316.

B. *littoralis;* foliis elongato-linearibus spinuloso-dentatis basi attenuatis subtùs aveniis, perianthiis deciduis, folliculis compressis bracteisque strobili apice tomentosis, caule arboreo, ramulis tomentosis.—*Brown in Linn. trans.* 10. *p.* 204. *Prodr.* 392. *Römer et Schultes,* 3. 438.
Frutex *in horto orgyalis, ramulis gracilibus purpureo-cinereis villosis.* Folia *linearia, in petiolo attenuata, apice truncata, spinuloso-dentata præsertim ultra medium, suprà subtilissimè pubescentia, subtùs albo-lanata, avenia, costâ denudatâ.* Amentum *cylindraceum, calycibus rufis bracteisque sericeis, stylis rigidis, purpureis.*

A native of the southern part of New Holland, where it was found by Mr. Brown without flowers. It is now not uncommon in our conservatories, but rarely flowers. Our drawing was made in the conservatory of his Grace the Duke of Northumberland, at Syon, in March last.

If we can judge from our wild New Holland specimens, the species is subject to variation in the denticulations of the leaves. We have what appears to be identical with this, with some leaves altogether entire, and the remainder very slightly toothed.

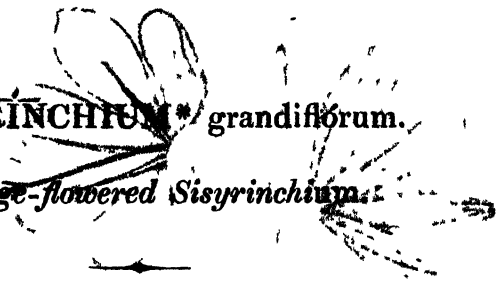
A shrub, growing as high as a man in our conservatories, with slender purple-gray villous branches. *Leaves* long, linear, tapering to the petiole, truncate, spinous-toothed,

* See fol. 1316.

especially beyond the middle, with very minute down on the upper side; white with down, except the naked mid-rib, and veinless, beneath. *Amentum* cylindrical, with rufous calyxes, which are downy, as well as the bracteæ and rigid purple styles.

J. L.





SISYRINCHIUM* grandiflorum.

Large-flowered Sisyrinchium.

TRIANDRIA *MONOGYNIA.*

Nat. ord. IRIDEÆ *Jussieu.* (*Introduction to the natural system of botany, p.* 260.)
SISYRINCHIUM.—Suprà, vol. 13. *fol.* 1067.

S. *grandiflorum;* caule stricto glauco striato foliis erectis vaginantibus longiore, spathis bifloris: foliolis erectis altero floribus longiore, perianthio pedicello subæquali.
S. grandiflorum. *Douglas.*
Perennis, radicibus fibrosis, repentibus. Caulis *erectus, striatus, glaucus, simplicissimus, palmaris v. paulò ultrà.* Folia *glauca, inferiora squamiformia, superiora erecta, basi vaginantia, apice patentia, caule breviora.* Spatha *erecta, bivalvis, foliolis inæqualibus: exteriore lineari-lanceolato, floribus longiore.* Perianthium *atropurpureum, striatum, filamentis stylisque sanguineis, antheris luteis.*

This beautiful little herbaceous plant is a native of the North-west of North America, near the great falls of the river Columbia, where Mr. Douglas found it in 1826. It is a hardy herbaceous plant, flowering in May and June, but is at present exceedingly rare, only two or three seeds having grown, and the plants from these increasing very slowly. It appears to love a peat border among bushes. Our drawing was made in the Garden of the Horticultural Society.

A perennial plant, with fibrous, creeping roots. *Stem* erect, striated, glaucous, quite simple, a span or little more in height. *Leaves* glaucous, the lower scale-like, the upper

* The σισυρίγχιον of Theophrastus appears to have been either the modern Iris Sisyrinchium or Trichonema Bulbocodium, both plants nearly related to this. It was so called because it was sought as food by pigs, or συες.

erect, sheathing at the base, spreading at the apex, shorter than the stem. *Spathe* erect, 2-valved, with unequal leaflets; the outer linear-lanceolate, and longer than the flowers. *Perianth* deep purple, striated; the filaments and styles sanguine, the anthers yellow.

J. L.



SPIRÆA* ariæfólia.

Beam-Tree-leaved Spiræa.

ICOSANDRIA *PENTAGYNIA.*

Nat. ord. Rosaceæ *Jussieu.* (*Introduction to the natural system of botany, p.* 81.)

SPIRÆA L.—*Calyx* 5-fidus, persistens. *Stamina* 10-50 cum petalis toro calyce adhærente inserta. *Carpella* 1-00 distincta, rariter basi coalita, brevè apiculata, sessilia, rarò stipitata. *Semina* 2-6 suturæ internæ affixa; exalbuminosa. *Embryo* inversus, cotyledonibus crassiusculis.——Frutices *inermes, v.* herbæ *perennantes.* Rami *alterni.* Folia *alterna, simplicia, rarò decomposito-pinnatisecta, nervis pennatis v. ternato-palmatis.* Flores *albi aut rubicundi nunquam flavi.*—Dec. prodr. 2. 541.

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§ Spiraria. *Ovaria libera. Torus apice liber, basi tubo calycino concretus. Carpella non inflata.*—Frutices. Flores hermaphroditi paniculati. Folia serrata exstipulata.—*Dec. l. c.*

S. *ariæfolia; foliis ovatis obtusis inciso-serratis subpinnatifidis basi cuneatis subtùs tomentosis, paniculâ multiflorâ villosâ basi divaricatâ.*

S. ariæfolia. *Smith in Rees, vol.* 33. *Dec. prodr.* 2. 544.

S. discolor. *Pursh fl. am. bor.* 1. 342. *Dec. prodr.* 2. 545.

Frutex *erectus, dumosus, ramis strictis epidermide cinnamomeo-griseo obductis, subangulatis.* Folia *simplicia, ovato-oblonga, suprà glabra, subtùs tomentosa, nunc grossè serrata, nunc inciso-serrata, nunc pinnatifida, basi cuneata, laciniis obtusis, serratis;* stipulis *obsoletis.* Paniculæ *terminales, multifloræ, densæ, ramis inferioribus sæpiùs longioribus, divaricatis; ramulis villosis.* Calyx *rotatus, albus, 5-partitus, lacinis ovatis, villosis, petaloideis.* Petala *laciniis calycinis subæqualia, oblonga, venis tribus in medio.* Stamina *in disco tubum calycis [illegible] inserta.* Carpella 5, *villosa, monosperma, ovulo solitario appenso.*

A handsome hardy shrub, native of the North-west of North America, where its seed was collected by Mr. Douglas for the Horticultural Society. It was

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* The shrub called *τραγέα* by Theophrastus, and *spireon* by Pliny, is supposed by some to have been our Spiræa salicifolia, by others Viburnum Lantana. The latter is called by the modern Greeks *λυγαριὰ*; the former seems to be u[illegible]

originally discovered by Mr. Menzies, from whose specimens Smith described it in Rees's *Cyclopædia*. S. discolor of Pursh is no doubt the same species, and will therefore have to be expunged. We adopt Smith's name, although the most recent, because there appears to be no meaning in Pursh's.

In this country it has as yet been known so short a time in a living state, that it is not possible to state what stature it will acquire; it is, however, probable that it will never exceed 9 or 10 feet in height, if it should become so large. It flowers in June and July, when its large loose panicles render it a handsome object.

Quite hardy, and easily increased by cuttings or by layers.

This is one of a set of plants, which, if they be considered the type of the genus Spiræa, are distinguished by their oligospermous distinct carpella and exstipulate leaves; they are nevertheless retained by the most recent Botanists that have examined them, in the same group as Spiræa Aruncus, opulifolia, and sorbifolia,—in all which the habit, fruit, and foliage, are decidedly different. We confess it appears to us, that there is little consistency in this, while such genera as Sieversia and Geum, Potentilla and Fragaria, are separated. Surely it would be more conformable to the modern principles of constructing genera, principles that have been well illustrated by M. Decandolle's recent work upon Umbelliferæ, to consider the old Spiræa made up of several distinct genera; among which Seringe's section Sorbaria, or our Schizonotus, which is to Rosaceæ nearly what Nigella is to Ranunculaceæ, should be among the first to be recognised.

J. L.



AZÁLEA* calendulácea; *var.* subcúprea.

Copper-coloured Highclere Azalea.

PENTANDRIA *MONOGYNIA.*

Nat. ord. Ericeæ *Juss.* (*Introduction to the natural system of botany, p.* 182.)
AZALEA.—Suprà, vol. 2. *fol.* 120.

A. *calendulacea*, subnudiflora; foliis utrinque pubescentibus: adultis hirsutis, floribus amplis non viscosis, calycis dentibus oblongis, corolla tubo hirsuto laciniis breviore.—*Suprà, fol.* 145, with the synonyms.
Var. subcuprea. *Gowen in litt.*

This and the following are a part of the result of some extensive experiments instituted at Highclere, the seat of the Earl of Caernarvon, for the purpose of improving the colours of the American Azaleas by cross impregnation. With what perfect success this attempt has been rewarded will be apparent from an inspection of these figures, and of some others that will appear hereafter, which have been selected from a very considerable number of equally striking varieties. Mr. Gowen, under whose direction the intermixture has been made, has favoured us with the following particulars of these experiments, which are already so important to Horticulture, and which may also throw light upon some physiological questions in which the world is much interested, but which cannot be satisfactorily settled without multiplied observations, conducted with the utmost precision.

This was one of those which, it will be seen, were obtained from a variety of Azalea nudiflora, called in the

* From ἀζαλέος, dry; either in allusion to the places where the species grow, or to the dry brittle nature of their branches.

Nurseries *rubescens*, fertilised by the pollen of that Azalea calendulacea which is known as *Leeii triumphans*. Mr. Herbert informs us that the seedlings thus raised are very sterile; but that he has obtained from one of the best varieties a few seeds which have vegetated.

Mr. Gowen's remarks are as follow:—

"I have much pleasure in giving you the history of the beautiful seedling Azaleas, which flowered last summer in the Garden at Highclere. Lord Caernarvon had long been desirous of raising seedlings from crosses between the high-coloured and late-flowering varieties. To effect this object, I selected for mother plants the Azalea coccinea var. minor, A. coccinea var. major, and a late-flowering variety called by some of the Nurserymen A. rubescens, by others A. autumnalis rubra. The two first-mentioned varieties are in the climate of Highclere, and perhaps throughout England, very unproductive of pollen, rarely seeding when unassisted by art. A. rubescens is somewhat more prolific, but unaided may be reckoned a shy seeder also.

"The two A. coccineas were dusted with the pollen of a late-flowering A. pontica for several successive mornings. No care was taken to deprive the plants experimented upon of their anthers, their deficiency of pollen having been ascertained. Many pods swelled, which were found to contain heavy seed; these were gathered at the approach of winter, kept in a drawer some weeks, and sowed in the first week in January. Of numbers which vegetated, about four hundred seedlings were raised. The A. rubescens was impregnated with the pollen of A. calendulacea var. triumphans, and from this cross about a hundred were raised. Of the first-mentioned four hundred seedlings, perhaps three-fourths are, in foliage, inflorescence, and habit, so like their father, A. pontica, that, though varying much in the tints of the corolla, any person not aware of their origin would reckon them mere seminal varieties of that species, so greatly does its type predominate. Some are very lovely, especially one possessing extraordinary merit, which we have named A. pontica versicolor. Generally speaking, they run through many intermediate shades, from orange to the lightest cream colours, suffused with pink in A. pontica versicolor, and are very fragrant. The remaining fourth part of these seedlings take after their mothers in habit, but their foliage is on a larger scale. The inflorescence preserves little trace of A. pontica, yet varies considerably from that of either of the varieties of A. coccinea. The colours are more lively, and of various tints of crimson, and vivid pink or scarlet; and there is in several, particularly in the specimen (A. thyrsiflora) sent to you, a tendency more or less developed to produce flowers laterally. In some the vivid pink and light crimson tints are very beautiful; and there is hardly an individual among them which, a few years ago, would not have been thought an acquisition to the Garden. The seedlings from A. rubescens, by A. triumphans, were never with me the objects of so much solicitude as those just described. They surpass them

greatly in magnificence, following generally the type of A. calendulacea, and are very late-flowering plants, of many gradations of colour, from pale yellow to orange, salmon-colour, pink, and beautiful mixed tints; they produce large umbels, with expanded corollas, are elegant in habit, and hardly to be surpassed in loveliness. Of those which flowered here last summer for the first time, we were able to discriminate sufficiently to give names to about thirty varieties, each of distinguished beauty or fragrance.

NAMES OF VARIETIES.

A. Cartonia
Govenia
polyantha
basilissa
imperatrix
habrantha
habropis
scintillans
chariessa
jasminodora
sanguinea
Herbertiana
eugenes
cuprepes
eudæmon
calocoryphe
calostephane

A. calodendron
aurotincta
æritincta
auroræ
pretiosa
delicata
erythræa
calantha
ochroleuca
inclyta
subcuprea
poikela
regia
dictatrix
pontica versicolor
——— expansa,
and many others

J. L.



AZÁLEA* nudiflóra; *var.* thyrsiflora.

The Highclere Scarlet Azalea.

PENTANDRIA *MONOGYNIA.*

Nat. ord. Ericeæ *Juss.* (*Introduction to the natural system of botany, p.* 182.)

A. *nudiflora*, subnudiflora; foliis lanceolato-oblongis utrinque glabriusculis concoloribus, nervo suprà lanuginoso subtùs setigero, margine ciliatis, floribus simplis nôn viscosis: tubo laciniis longiore, calycis dentibus brevibus ovali-subrotundis, staminibus longissimè exsertis. — *Suprà, fol.* 130, with the synonyms.

Var. thyrsiflora. *Gowen in litt.*

Mr. Herbert considers this a natural seedling of Azalea coccinea. It was raised at Highclere with the last, and is one of the most beautiful shrubs we have yet seen; none of the varieties formerly cultivated can be compared with it for the rich thyrses of flowers with which it is covered. It is referred to in the foregoing account.

J. L.

* See fol. 1366.





RÚBUS nutkánus.*

Nootka Raspberry.

ICOSANDRIA *POLYGYNIA.*

Nat. ord. Rosaceæ *Jussieu.* (*Introduction to the natural system of botany, p.* 81.)
RUBUS.—Suprà, vol. 6. *fol.* 461.

R. *nutkanus*; caule frutescso erecto flexuoso stolonifero apice glanduloso-piloso basi nudiusculo, foliis 5-lobis inæqualiter dentatis, corymbis simplicibus, calycibus subinermibus cuspidatis: laciniis corollæ æqualibus, stipulis connatis persistentibus.
R. nutkanus. *Dec. prodr.* 2. 566.
Frutex *omninò habitu Rubi odorati; differt ramis magis flexuosis minus setosis, imò nisi apice subinermibus, foliis opacis subtùs inermibus, denticulis magis inæqualibus, stipulis connatis persistentibus nec deciduis, corymbis simplicibus pauciforis nec paniculatis, demùm calycibus subinermibus cuspidibus petalis albis æqualibus nec hispidissimis cuspidibus petalis purpureis brevioribus.*

A native of the North-west coast of America, where it was found by Mr. Douglas, who sent its seeds to the Horticultural Society. It flowers irregularly from May to October, and in a wild state bears much larger flowers than those represented upon the figure, which is, however, a faithful copy of its present garden state.

It is propagated readily by cuttings, or by suckers, which it produces in great abundance: its fruit has not yet been seen.

In general appearance it is extremely like the common Rubus odoratus; but if the two plants, as they grow in Gardens, be compared, they will be found to exhibit following differences:—Rubus odoratus has straight

* According to De Théis derived from the Celtic *rub*, red. The classical writers appear to have applied it as we do.

stems covered with glandular pubescence, sub-lucid leaves, the denticulations of which are nearly equal, with all the under surface and petioles covered by glandular pubescence: its stipulæ are also distinct and deciduous. But in R. nutkanus the stems are decidedly flexuose, and destitute of all hairiness or armature, except now and then a weak solitary bristle; its leaves are not lucid, and neither they nor the petioles have any glands; the denticulations are very unequal; and the stipulæ are persistent and connate by their upper margins, as is shewn in the figure at 1. Add to this, the flowers of R. nutkanus are smaller, and usually appear in threes, while those of R. odoratus form a compound corymbose panicle. R. nutkanus also runs very much at the root, which R. odoratus does not. But in the wild state some of these distinctions disappear. The petioles of R. nutkanus are glandular, and the flowers are as large as those of R. odoratus; the difference in the denticulations also ceases to be appreciable. Are these plants, then, mere varieties or distinct species? This can only be answered by going into an inquiry which our limits preclude; it involves the question of whether the separation of European Rubuses into numerous species has been judicious or not; and within what bounds the specific characters of the genus are to be confined. To us it seems that, if the distinction between the Rubus corylifolius and cæsius of English Botanists be once admitted as valid, it is impossible to avoid receiving all the others that have recently been distinguished, unless the characters of species are wholly arbitrary, and not to be determined upon any fixed principles. We have before insisted upon the existence of a wide difference between Botanical and Natural species, and this appears to be confirmed by daily experience.

J. L.



ANOMATHÉCA* cruenta.

Blood-spotted Anomatheca.

TRIANDRIA *MONOGYNIA.*

Nat. ord. IRIDEÆ *Juss.* (*Introduction to the natural system of botany, p.* 260.)

ANOMATHECA Ker.—*Inflorescentia* spicata. *Spatha* bivalvis, brevis. *Corolla* tubuloso-sexfida, hypocrateriformis, subirregularis, erecta; *limbus* rotatus, laciniis oblongis cuneatis, tubo recto angustè fauciali subbrevioribus. *Stamina* secunda; (*antheris* parallelis). *Stigmata* angustissima, conduplicata, bipartita. *Capsula* ovato-globosa, papilloso-aspera. *Semina* biserialia, plurima, rotunda.——Herba *palmaris, v. ultradodrantalis, ortu obliquissimo proveniens, postquam erecta.* Bulbotuber *ovatum, exuviis mollibus stupaceo-fibrosis.* Folia *collateralia, plura* (4-8), *gladiata, infernè à latere interiore axi ferè tenus excisa, sæpè subundulata*; exteriora *latiora, subovato-gladiata, sæpiùs falcata.* Caulis *teres, subjunceus, paniculatus, multiflorus, nudiusculus, foliis plurimùm longior,* ramis *ad basin foliolo stipatis, plerumque divisis.* Flores *remotiusculi, magnitudine mediâ.* Spatha *pusilla, subherbacea, obtusa.* Corollarum laciniæ *parum inæquales, obtusæ, deorsùm attenutæ, roseo-albicantes;* infimæ tres *maculâ definitâ plerumque notatæ.* Antheræ *oblongæ, violaceæ, contiguæ, tubi fauce emicantes.* Capsula *piso majusculo parum grandior.* Semina *sinapeos subsimilia.* — Ker genera Iridearum, *p.* 111.

A. *cruenta;* limbo bilabiato tubo duplò breviore, maculis ovatis conformibus.

Valdè affinis A. junceæ, præsertim eæ in Botan. Magaz. depictæ, potiusquam isti grandiori et ramosiori Andreusii; differt tamen colore florum intensiore, limbo magis irregulari omninò bilabiato, et maculis faucis conformibus, nec intermediâ diversâ.

For this we are obliged to Mr. Tate, of Sloane Street, who communicated it in May last, with the information, that he had received it several years ago from the Cape, and finds it a very desirable plant, continuing to throw out flowering shoots till late in the autumn. The

* So called from ανομος and θηκα; on account of its frosted capsule.

bulbs should be planted in April, when intended as a border flower, and taken up in November.

A native of the Cape of Good Hope, and nearly related to Anomatheca juncea, of the same country, from which it differs chiefly in the longer tube of its flower, in the greater irregularity of the limb, in the deeper crimson colour, and in the form of the sanguine spots at the base of the three anterior segments.

J. L.



SALVIA Grahámi.

Mr. Graham's Sage.

DIANDRIA *MONOGYNIA.*

Nat. ord. LABIATÆ *Jussieu. (Introduction to the natural system of botany, p.* 239.)

SALVIA.—Suprà, vol. 16. *fol.* 1356.

S. *Grahami*; caule fruticoso erecto ramoso glanduloso-pubescente et bifariàm piloso, foliis petiolatis ovatis obtusis crenatis basi cuneatis vel rotundatis tenuissimè pubescentibus, racemis elongatis simplicibus, verticillastris remotis 2-6-floris, foliis floralibus ovatis acuminatis ante anthesin deciduis, calycibus tubulosis striatis glanduloso-pubescentibus: labio superiori integro dentibusque labii inferioris ovatis acuminatis, corollâ calyce duplò longiore: tubo basi intùs bidentato sub fauce ventricoso, labio superiori recto, inferioris lobo medio maximo orbiculato emarginato, staminibus corollâ brevioribus, stylo exserto apice subtùs villoso.—*Bentham.*

"Very nearly allied to S. microphylla of Kunth, which is a low, branching shrub, with much smaller rugose leaves, and smaller flowers. In my wild specimens of both species the verticillasters are biflorous only."—*Bentham.*

We are indebted to Mr. Bentham for the determination of this species, and for its specific character. For its introduction to the Gardens of Europe the public is obliged to J. G. Graham, Esq.; the gentleman from whose seeds the Salvia fulgens figured at fol. 1356 of this work was also raised. Mr. Graham found this species in the neighbourhood of the mines of Tlalpuxahua, as appears from his Herbarium. The wild specimens have less elongated racemes, and the leaves are much longer than their petiole; while in the garden plant the leaves are usually about the same length as the petiole.

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* See fol. 1205.

A suffruticose plant, about 3 feet high, with erect, branching, purple stems, which are slightly downy all over, but more so upon two of their sides than elsewhere. *Leaves* small for so large a plant, and compared with those of many other species, generally stained with dingy purple, ovate, simply serrated, or rather crenate, entire at the base, slightly pubescent on each side. *Flowers* bright purple, very handsome, about an inch long, including the calyx.

This begins to flower in July, and continues in beauty till October: its flowers are not so shewy as those of S. fulgens and splendens; but the richness of their purple, and their constant succession, amply compensate for inferiority of size. It should be planted out in the open border in May, and transferred to the greenhouse at the approach of frost; or if cuttings, by which it increases freely, are struck in the autumn, as a provision for another year, the old plant may be abandoned to its fate.

Our drawing was made in the Garden of the Horticultural Society, where it had been named by Mr. Bentham in compliment to the gentleman by whom it was discovered and introduced.

The upper and under surfaces of the leaf of this species abound with spherical particles of concrete oily matter lying in depressions of the surface. We cannot, however, discover that they are secreted in sacs within the tissue of the leaf, or that there is any peculiar provision for their elaboration. The only remarkable circumstance that we have observed connected with them is, that each spherule, when placed in water and slightly bruised, discharges an inconceivable quantity of active molecules.

J. L.



HAYLOCKI*A** pusilla.

Dwarf Haylockia.

HEXANDRIA *MONOGYNIA.*

Nat. ord. AMARYLLIDEÆ.

HAYLOCKIA. — Flos radicalis, erectus; tubo partim subterraneo in bulbo delitente, cylindrico, fauce ampliatâ; limbo semipatente. *Filamenta* conniventia, extra tubum (externa breviora profundiùs, interna longiora altiùs) inserta. *Antheræ* biloculares, incumbentes, versatiles. *Stylus* unicus, erectus, stigmatibus tribus suberectis, apice recurvato. *Capsula* brevi pedunculo extrusa, brevis, trigona, trisulca, trivalvis. *Semina* dorso rotundato complanata, cumulata, testâ nigrâ, *ferè ut in Zephyranthe.*—Herbert.

H. *pusilla;* foliis humifusis, autumnalibus, angustissimis, sulcatis, acutis, viridibus; flore autumnali præcoci, spathâ unifoliâ apice diviso, tubo unciali pallidè virescente, limbo unciali pallidè sulphureo, extùs maculosè purpurascente, intus ad basin purpurâ striato; laciniis undulatis, externis uncatis $\frac{5}{12}$ unciæ latis, internis $\frac{4}{12}$; filamentis brevibus albis, antheris aureis; stylo in tubo delitente, stigmatibus albis gracilibus, $\frac{3}{16}$ unciæ longis; bulbo subrotundo, fusco, parvo.—*Herbert.*

"This very curious little bulb flowered at Spofforth, in the greenhouse, on the 1st of September, having been sent from the neighbourhood of Buenos Ayres by Mr. Anderson, collector to Mr. Mackay, Nurseryman at Clapton, in company with Habranthus Andersoni and Zephyranthes mesochloa. It brings the western Amaryllideæ near indeed to Melanthaceæ. With bulb, foliage, capsule, and seed, that are scarcely distinguishable from Zephyranthes, it has a flower which is nearly that of a Colchicum. Mr. Ker has stated, that Colchicum approaches to Amaryllis by Bulbocodium vernum (his Colchicum bulbocodium) through Amaryllis lutea; though he would have more properly

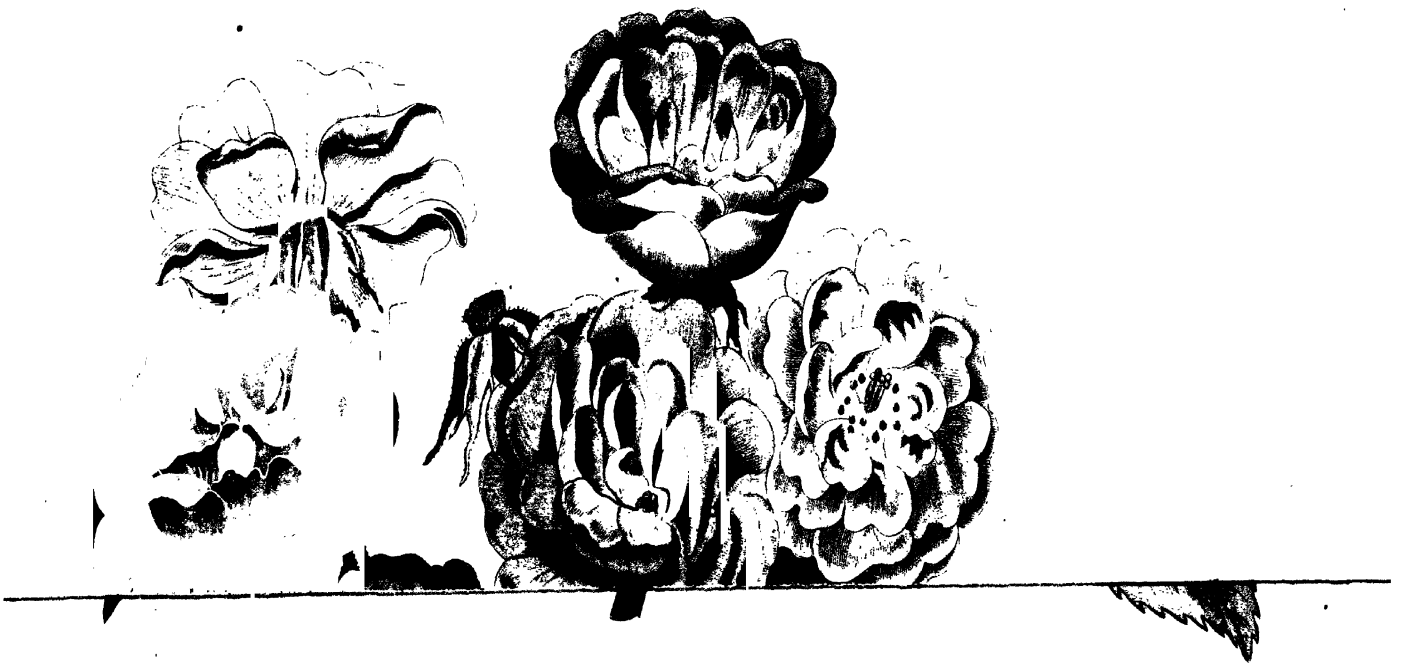
* Mr. Herbert informs us, that he has named this genus in compliment to "Mr. Matthew Haylock, who has the care of the collection of plants at Spofforth; and both there, and previously at Mitcham, in the course of the last twenty-two years, has brought no small number of plants, especially of this natural order, to blossom for the first time in this country."

said through Sternbergia colchiciflora, to which genus our plant has considerable affinity. It is necessary to premise, that we consider Amaryllis lutea to be quite distinct from Sternbergia. It is distinguished by an erect solid scape, an oval flattened germen, a tube and limb continuously funnel-shaped, and filaments conniving and inserted at equal height in the tube. It constitutes the genus Oporanthus (*Bot. Mag.* 2606,* and 2636 *in notâ*,) to which A. exigua and citrina probably belong. To those our present plant has little affinity, having no scape, the germen concealed in the bulb, the capsule extruded on a short peduncle, 3-lobed and 3-furrowed, the tube cylindrical with a widened mouth, the filaments inserted at alternate heights without the tube, and the style concealed in the tube. Sternbergia, including Clusiana with Colchiciflora, which is Kitaibel's type of the genus, has no scape, the tube of the flower being partly subterraneous, the stamens erect, the anthers, according to him, 4-locular (though it is difficult to credit that), the capsule oblong, subtriangular, pushed out of the ground, the seeds round and black. Never having seen the plant, we cannot state what is the insertion of the filaments, &c. From this genus, to which our plant is evidently allied, it differs in having a short, rounded, 3-lobed capsule, seeds flattened like those of Zephyranthes, and probably also in the insertion of the filaments, and other particulars which we know not at present accurately in Sternbergia. It belongs to a different hemisphere, and does not flower like Sternbergia at a different season from the leaves, but its flower just precedes the leaves; the bulbs, which do not flower, having leaves an inch and a half long at the time of flowering. Sternbergia flowers in the autumn, and pushes its leaves in spring. The stigma of Haylockia pusilla is concealed in the enlarged mouth of the tube."—*Herbert.*

The foregoing observations have been communicated by the Hon. and Rev. W. Herbert. We are ourselves unacquainted with the species.

J. L.

a The spathe.
b Section shewing the inside of half the flower, the style and stigma, and the insertion of the filaments.
c An outer petal and stamen, coloured.
d The seed-vessel.
e A seed.



ROSA* multiflora; *var.* platyphylla.

The Seven Sisters' Rose.

ICOSANDRIA *POLYGYNIA.*

Nat. ord. Rosaceæ *Juss.* (*Introduction to the natural system, p.* 81.)
ROSA.—Suprà, vol. 1. *fol.* 46.

Div. *Systylæ.* Styli in columnam elongatam cohærentes. Stipulæ adnatæ.
R. *multiflora;* ramulis pedunculis calycibusque tomentosis, foliolis mollibus lanceolatis rugosis, stipulis pectinatis.—*Rosarum monogr.* 119.
R. multiflora. *Suprà, fol.* 425, cum synonymis.
β. *platyphylla;* major; floribus versicoloribus.
R. Grevillei. *Hort. Angl.*
R. multiflora platyphylla. *Red. ros.* 2. *p.* 69. *Dec. prodr.* 2.

This, the most beautiful of all the climbing roses of our Gardens, is a native of China, whence it was introduced some time between 1815 and 1817. For a long period it did not flower, and little importance was attached to it. Since its splendid blossoms have been produced, it has most deservedly become a general favourite. Nevertheless, it is not so common as might have been expected; many Gardens, exceedingly choice in the selection of the plants they contain, being without it. This circumstance is probably to be explained by the young shoots being tender and liable to be destroyed by frost, in which case no flowers are produced, the blossoms being always formed upon the twigs of strong two years' old wood. Great care should, therefore, be taken to protect the shoots by mats or straw during the winter.

Our drawing was made from a plant growing upon a

* This name is said to be derived from the Celtic *rhod* or *rhudd*, signifying red.

south wall in the Garden of the Horticultural Society, where it flowered in a most beautiful manner: but the situation afterwards proved too hot for it, and the plant became sickly. An east or west wall, or open trellis-work, suits it better. It is admirably adapted, on account of its loose rambling habit, to form an ornament to an archway.

The Chinese call it the Seven Sisters' Rose, because about seven flowers open at the same time, each varying from the other from a pale rose-colour, through several gradations, to a deep rich crimson. It blossoms from May to September.

J. L.



PRÁTIA begonifólia.

Begonia-leaved Pratia.

SYNGENESIA *MONOGAMIA.*

Nat. ord. LOBELIACEÆ *Juss.* (*Introduction to the natural system of botany, p.* 187.)

PRATIA Gaudichaud.—*Calyx* ovario adnatus, limbo libero quinquedentato. *Corolla* subinfundibuliformis, dorso usque ad basin fisso; limbo quinquefido patente. *Stamina* 5; *filamenta* superne in tubum connata; *antheræ* connatæ. *Stigma* bilobum. *Capsula* calyce carnoso obtecta, bilocularis, indehiscens; loculis polyspermis.——Herbulæ *pusillæ.* Caules *filiformes, ramosi.* Folia *crassiuscula*; flores *axillares, solitarii, pedunculati, pallidè roseo-violacei*; pedunculis *subbracteolatis.*—Gaudich. voyage de l'Uranie; Botan. p. 456.

P. *begonifolia*; foliis cordato-orbiculatis denticulatis pilosis pedunculis longioribus, ovariis pedunculisque glaberrimis.

Lobelia begonifolia. *Wallich in Roxb. flora indica,* 2. *p.* 115.

Herba *perennis, sempervirens.* Caules *prostrati, radicantes, filiformes, pilosi.* Folia *subcarnosa, orbiculata, cordata, denticulata, utrinque præsertim subtùs pilosa, paginâ inferiore sæpiùs discolore.* Flores *axillares, solitarii, pedunculo glaberrimo petiolo paulò longiore.* Ovarium *oblongum, glaberrimum, carnosum, biloculare, polyspermum.* Calycis *foliola lineari-subulata, æqualia, corollâ duplò breviora.* Corolla *decidua, bilabiata; labio superiore ad basin fisso laciniis subulatis erectis; inferiore trifido.* Filamenta *in cylindrum conniventia*; antheræ *connatæ, glabræ; duabus inferioribus apice setam solitariam gerentibus.* Fructus *indehiscens, carnosus, bilocularis, polyspermus, calyce coronatus.*

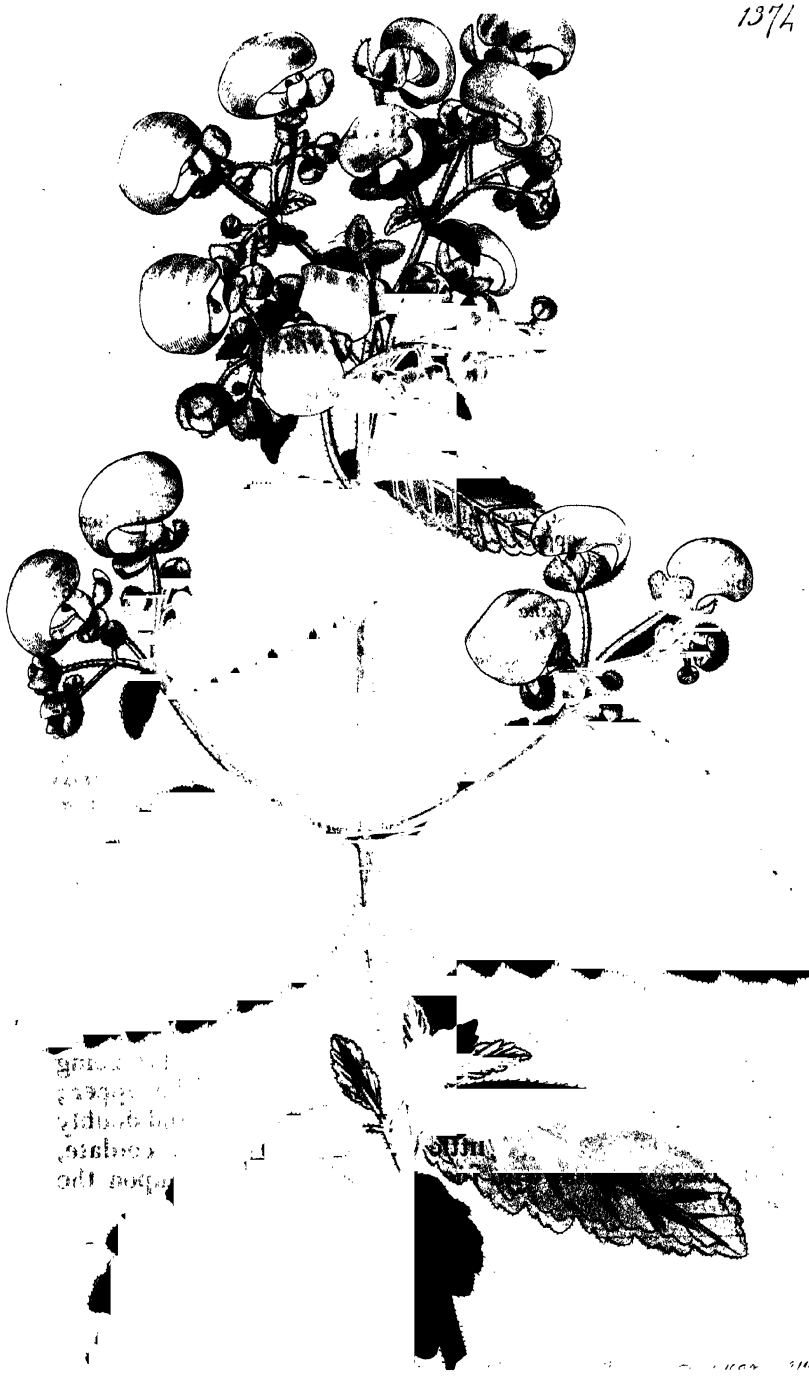
A pretty little plant, found by Dr. Wallich in shady moist places in Nipal, and extremely well adapted for forming neat patches upon rock. It was thus cultivated that we saw it growing at Syon in the collection of his

* Named in honour of M. Prat-Bernon, a young naval officer (*elève de la marine de première classe*), who died on board the French discovery ship, the Urania, in the first part of her voyage. His claims to Botanical commemoration are not mentioned by M. Gaudichaud.

Grace the Duke of Northumberland. Mr. Forrest informs us that it bore all the rigour of last winter in a cold frame; that it was planted out upon the rockwork early in spring, and has been in blossom from April up to the period of the publication of this plate. It grows freely in a mixture of peat and loam, and roots at every joint, perfecting seeds abundantly. Some of the runners were 18 inches long.

The principal difference between Pratia and Lobelia consists in the baccate fruit of the former, accompanied by the peculiar habit of the species now represented.

J. L.



CALCEOLARIA* diffúsa.

Spreading Calceolaria.

Nat. ord. SCROPHULARINEÆ *Jussieu.* (*Introduction to the natural system of botany, p.* 228.)
CALCEOLARIA.—Suprà, vol. 9. *fol.* 723.

C. *diffusa;* suffruticosa, procumbens, foliis cordato-ovatis grossè duplicato-serratis petiolatis oppositis ternatisve subtùs incanis, floribus terminalibus axillaribusque corymbosis.
C. bicolor. *Graham in Edin. new philosophical journal, Oct.* 1830, *p.* 366: *not of Flora Peruviana.*
Suffruticosa; ramis *teretibus, diffusis, glabris, castaneis, ramulis pallidè viridibus, levissimè pubescentibus.* Folia *cordato-ovata, opposita v. ternata, mollia, rugosa, duplicatò grossè serrata, longè petiolata, pilosa, subtùs incana;* petiolo *nunc purpurascente.* Flores *in corymbis terminalibus axillaribusque dispositi; foliis floralibus breviùs petiolatis, simpliciter serratis v. integris.* Pedicelli *pilosi.* Sepala 4, *ovata, pubescentia, inferiore angustiore et paulò longiore.* Corolla *labio* superiore *ovato cucullato obtuso staminibus paulò breviore;* inferiore *in superiorem incumbente, sed non involvente, apice sulphurea, basi albidâ, fauce barbatâ.*

Very nearly related to Calceolaria bicolor of the *Flora Peruviana*, with which it has been identified by our friend Dr. Graham: but if there is to be any faith in figures or descriptions, it must, we think, be a distinct species. C. bicolor agrees indeed with this in the colour of its flowers; but it is described with an erect stem, and is represented as being very hirsute, with the lower lip remote from the upper; while this has a procumbent stem, with coarsely and doubly serrated leaves, a very little pubescent, strongly cordate, and hoary beneath, with the under lip lying close upon the upper.

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* See fol. 1214.

This was found at Canta, in Peru, by Mr. Crukshanks, where the authors of the *Flora Peruviana* say that their C. bicolor inhabits; but we presume that that place abounds in Calceolarias, as we have specimens of two other species, for which we are indebted to the kindness of Mr. Crukshanks.

A half-hardy plant, growing and flowering beautifully in the open border during the months of July, August, and September; but requiring to be taken up at the approach of the cold season, and kept in a frame during winter. Propagated both by seeds and cuttings.

Our drawing was made in the Garden of the Horticultural Society.

J. L.



PALÁVIA* rhombifolia.

Rhomb-leaved Palavia.

MONADELPHIA *POLYANDRIA*.

Nat. ord. MALVACEÆ *Juss.* (*Introduction to the natural system of botany, p.* 33.)

PALAVIA Cav.—*Calyx* nudus, 5-fidus. *Carpella* capsularia, monosperma, in capitulum absque ordine aggregata.——Differt à Sida, ut Malope à Malva; et à Malope ut Sida à Malva.—*Dec. prodr.* 1. 458.

P. *rhombifolia;* foliis rhomboideis lobato-crenatis ad venas sparsim stellato-pilosis pedunculo brevioribus, stipulis subulatis ciliatis viridibus, petalis obovato-cuneatis obliquè emarginatis, caule prostrato ramoso parcè stellato-piloso.—*Graham in Edin. new philosophical journal, Oct.* 1830, *p.* 369.

A native of Lima, in Peru, where seeds were collected by Mr. Crukshanks, who presented them to the Horticultural Society, in whose Garden the species blossomed in the open border in August, but subsequently perished without yielding seed.

Dr. Graham, who obtained it at Edinburgh from the same liberal correspondent, rightly distinguishes it from Palavia moschata, and describes it as follows:—

"Annual? (Certainly.) *Stem* prostrate, branched, sprinkled very loosely with rather rigid hairs, which are single or stellate. *Leaves* 1¾ inch long, 1½ broad, alternate, petioled, soft, bright green above, paler below, rhom-

* Named by Cavanilles in honour of "Don Antonio Palau and Verdera, Professor of Botany at Madrid, who has translated the *Philosophia Botanica* of Linnæus into Spanish, with notes, and is now occupied with a similar labour upon the *Genera et Species;* of which the first volume has already appeared, containing the more recent genera and species, along with an accurate description of the plants, and their economical or officinal uses."—*Cavanilles in* 1785.

boid, glabrous, sublobate or deeply and unequally crenate, nearly entire at the base, 5-nerved, veined, the nerves and veins prominent below, channelled above, and both above and below, but especially below, loosely sprinkled with hairs similar to those on the stem. *Petioles* 1 inch long, rather shorter than the leaves, having a shallow groove along their upper surface, ciliated. *Stipulæ* subulate, ciliate, green, spreading, connivent at the apices. *Peduncles* 3 inches long, solitary, axillary, longer than the leaves, loosely provided with hairs like those on the other parts of the plant, slightly tapering, jointed near the calyx, but not swollen at the joint. *Flowers* large, inodorous. *Calyx* persisting, 5-cleft, green, more hairy, both within and without, than any other part of the plant; tube somewhat fleshy, and lighter coloured than the cordate, ovate, acute, more membranous segments, the edges of which are compressed, and prominent in the bud. *Corolla* three times as large as the calyx, rose-coloured, veined, flat, more than two inches across, and becoming paler when fully expanded. *Petals* ciliated at the base."

J. L.



COREOPSIS* Atkinsoniána

Perennial Dyer's Coreopsis.

SYNGENESIA *POLYGAMIA.*

Nat. ord. COMPOSITÆ. § Corymbiferæ *Jussieu.*—(*Introduction to the natural system of botany, p.* 197.)
COREOPSIS.—Suprà, vol. 1. *p.* 7.

C. *Atkinsoniana;* foliis glaberrimis, radicalibus bipinnatifidis; caulinis pinnatis laciniis linearibus spatulatis, flosculis radii basi sæpiùs maculatis irregulariter 3-lobis, radice perenni.
C. Atkinsoniana. *Douglas.*
Perennis. Folia *atroviridia, glaberrima;* radicalia *bipinnatifida, laciniis oblongo-linearibus obtusis;* caulina *opposita, pinnata, laciniis lineari-spatulatis.* Involucrum exterius 8-*phyllum, foliolis lineari-oblongis, margine paululùm membranaceis;* interius 8-*phyllum, campanulatum, foliolis ovatis, membranaceis, apice subcoloratis.* Flosculi *radii vitellini, oblongi, obtusi, inæqualiter trilobi, nunc basi brunneo maculati, nunc unicolores.* Discus *purpureo-brunneus.* Paleæ *receptaculi filiformes, brunneæ, flosculorum longitudine.* Ovaria [illegible]

A native of a place called Mewries Island, in the river Columbia, where it was found growing abundantly in the year 1825.

At first sight it resembles C. tinctoria so much as to seem a slight variety only of that species; but upon a more exact examination, it proves very distinct in its perennial root, and taller more branched stems, and less strongly blotched flowers. In the early part of the summer, when C. tinctoria is in perfection, this will attract but little attention; but when the charms of the former are past away, Coreopsis Atkinsonia becomes, not indeed its rival, but a yet more interesting beauty.

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* See fol. 1228.

Propagated either by division of the roots, or by seeds, which are produced abundantly. Flowers from July to November.

Our drawing was made in the Garden of the Horticultural Society, where the species had been named by Mr. Douglas in compliment to William Atkinson, Esq., of Grove End, his tried and steady friend, to whom horticultural architecture is under obligations that posterity will not be slow to appreciate.

J. L.



LUPĪNUS polyphȳllus; *var.* albiflorus.

White large-leaved Perennial Lupine.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ *Juss. Tribus* Phaseoleæ *Dec.* (*Introduction to the natural system of Botany, p.* 86.)
LUPINUS.—Suprà, vol. 6. *fol.* 457.

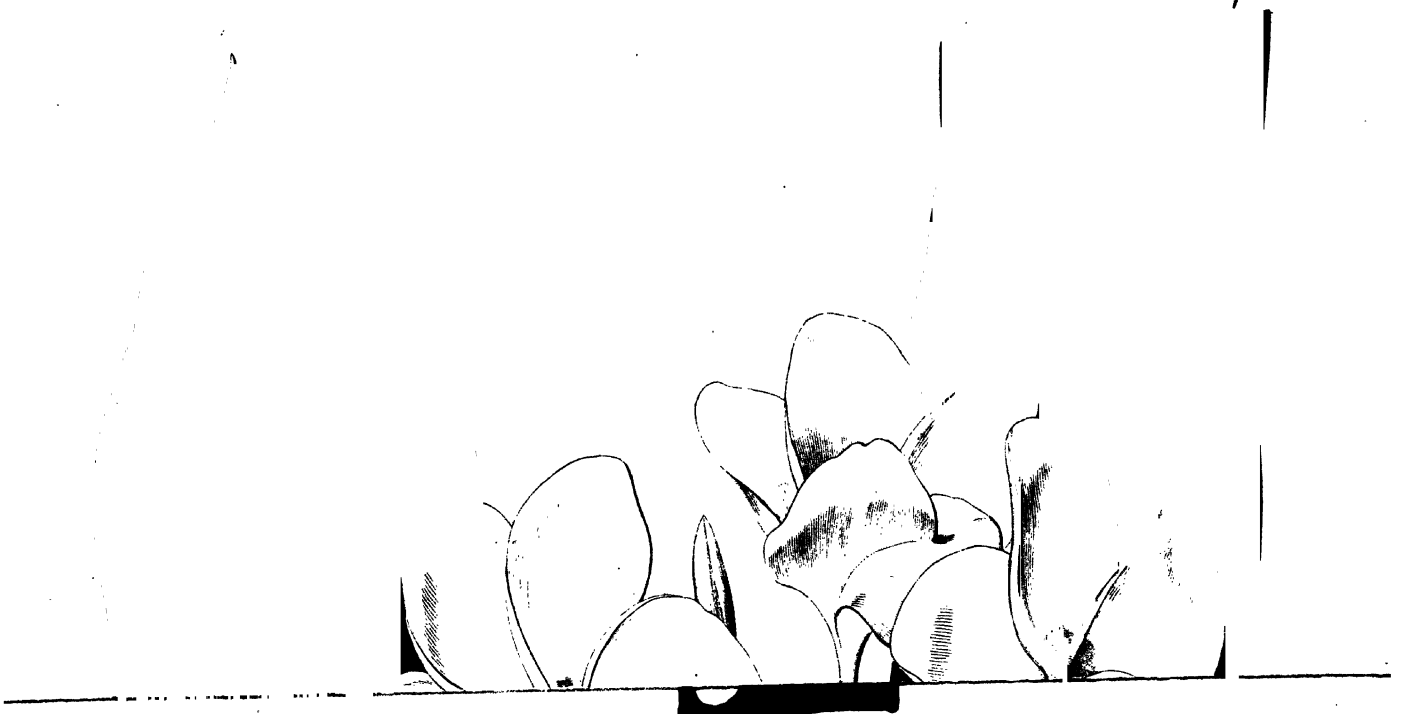
L. polyphyllus. *Suprà, vol.* 13. *fol.* 1096.
β. floribus albis; white-flowered.

This beautiful plant is a wild variety of that deep-blue species now so common an ornament of our Gardens. It was found by Mr. Douglas in North-west America, and perpetuates itself by seeds without varying.

Except in the pure white of its corolla, it differs in no respect from L. polyphyllus itself.

J. L.

See folio 1198.



W. Hart. sculp. [illegible] J. Watts. sc.

PLUMÉRIA* Lambertiána.

Mr. Lambert's Plumeria.

PENTANDRIA *MONOGYNIA.*

Nat. ord. APOCYNEÆ *Juss.* (*Introduction to the natural system of Botany, p.* 213.)

PLUMERIA.—Suprà, vol. 6. *fol.* 480.

P. *Lambertiana;* foliis oblongis acuminatis planis, corollâ albo-luteâ inodorâ; laciniis latè rhomboideis obtusis.

Caulis *crassus, carnosus, arboreus.* Folia *oblonga, plana, glaberrima, utrinque acuta, sæpè* 8 *uncias longa,* 2½ *lata.* Cymæ *umbellatim aggregatæ super pedunculo communi petiolis longiore, primùm pube rarâ levissimâ obsito, mox glaberrimo.* Flores *omninò* P. bicoloris, *nisi quod sunt inodori, paulò majores, laciniis latioribus et rotundioribus.*

Mr. Lambert informs us that he raised this species from seeds sent him from Mexico by the late Mr. Cowan, and that it appears to him essentially distinct from all published species. We know that Mr. Lambert cultivates this genus with particular care, and that the distinction of its species has been studied by him with great attention: we therefore adopt his opinion, merely remarking, that P. bicolor, published at fol. 480 of this work, equally a native of Mexico, seems distinguishable only by its fragrant flowers, the segments of which are rather narrower. In this plant the blossoms are absolutely scentless.

We trust that the name of Mr. Lambert having been already associated with almost every beautiful family of plants, will not be an objection to our attaching it to this species also, which he was not only the first to bring to perfection in England, but also to distinguish from those most nearly related to it.

* So called in honour of Charles Plumier, a French Botanist; for some particulars respecting whom the reader is referred to fol. 780 of this work.

For an opportunity of describing and examining the original specimen from which the drawing was taken, we are indebted to the same liberal friend of science, by whom it had been carefully preserved and deposited in that celebrated herbarium, which, created solely for the advancement of Botanical knowledge, at all times open, in the most unrestrained manner, to those who would consult it, has, for these reasons, conferred most essential benefit upon the science it illustrates, and has given to its possessor a name that his contemporaries may envy, but which posterity will respect.

A stove plant, propagated with difficulty by cuttings. Our drawing was made many years ago, from a plant that flowered at Boyton, in July.

Stems thick, fleshy, arborescent. *Leaves* oblong, flat at the edge, quite smooth, acute at each end, often 8 inches long and $2\frac{1}{2}$ inches broad. *Cymes* collected in an umbellate manner, upon a common peduncle, which is longer than the petioles; when young, covered with a very delicate, perishable down, afterwards becoming quite smooth. *Flowers* exactly those of *P. bicolor*, except being destitute of fragrance, and rather larger, with broader and rounder segments.

J. L.



POTENTILLA* argúta.

Close-flowered Potentilla.

ICOSANDRIA *POLYGYNIA.*

Nat. ord. Rosaceæ *Juss.* (*Introduction to the natural system of Botany, p.* 81.)

POTENTILLA L.—*Calycis* tubus concavus, limbus 4-5-fidus, extùs 4-5-bracteolatus. *Petala* 4-5. *Stamina* 00. *Carpella* 00, stylo laterali donata, in receptaculo persistente exsucco capitato. *Semen* appensum.—— Herbæ *aut* suffrutices, foliis *compositis*, stipulis *petiolo adnatis*, floribus *albis*, *luteis*, *rariter rubris*.—Dec. prodr. 2. 571.

P. *arguta;* viscosa hirsutissima, caule erecto subsimplici, foliis subinterruptè pinnatis; foliolis rotundato-ovatis duplicatò inciso-dentatis obliquis, stipulis ovatis acutis integris, floribus aggregatis subsessilibus, foliolis calycinis inæqualibus oblongis acutis, petalis obovatis calyce longioribus. *Torrey's Flora of the United States, vol.* 1. *p.* 499, ex anglicâ versus, sub P. confertiflorâ.

P. confertiflora. *Spreng. cur. post. p.* 198.

P. obliqua. *Douglas in herb. nostr.*

P. ferruginea. *Douglas in Hort. Soc. Hort.*

P. arguta. *Pursh Fl. Am. sept.* 2. 736.

P. pennsylvanica β. *Dec. prod.* 2. 581.

Boottia sylvestris. *Bigelow's plants of Boston.*

Radix *perennis, crassa.* Herba *tota viscosa, pube subferrugineâ vestita.* Folia *radicalia plurima, erecta, pinnata, aliquandò paulò interrupta, sub 5-juga cum impari æquali;* foliola *subrotundo-ovata, inciso-serrata, basi subobliqua, inferioribus multò minoribus.* Caulis *erectus, parùm ramosus, pedalis v. bipedalis, foliorum foliolis magis elongatis minùs interruptis, stipulis integris v. apice dentatis.* Flores *racemis densis subcapitatis aggregati.* Calyx *campanulatus, laciniis interioribus ovato-oblongis mucronulatis, exterioribus linearibus.* Petala *pallidè flava, obovata, calyce paulò longiora.* Stamina 20, *disco pentagono carnoso inserta.* Styli *plurimi, carnosi, ab ovario citò decidua.* Achenia *sicca in receptaculo exsucco.*

A native of North America. Dr. Torrey speaks of it as not uncommon on rocky hills and banks. Mr. Douglas

* So named, as it is said, in reference to the *potential* qualities ascribed to some species.

found it about Lake Winipeg and Red River, and introduced it into the Garden of the Horticultural Society, where our drawing was made in August last.

It is a hardy perennial, with a handsome foliage and not inelegant inflorescence.

Dr. Torrey cites to this species, with a mark of doubt, the Geum agrimonoides of Pursh, said by that writer to have a white flower. We have examined the Lambertian Herbarium, in which this plant is deposited, and have recognised it as a species previously well known to us, which we believe, although an undoubted Potentilla, to be distinct from this. Mr. Don at the same time pointed out the original specimen of P. arguta of Pursh, of which we think with him P. confertiflora is a synonym.

The following is Dr. Torrey's description of the plant.

Root thick, fuscous; whole plant with a dense brownish pubescence, and when young viscid. *Stems* numerous, about 2 feet high, terete, striate. *Leaves* mostly in tufts about the root, on very long petioles; leaflets 5-7 pairs, an inch and a half or more in length, often with foliaceous bracts, or minute leaflets, at the base, coarsely and doubly serrate; the serratures rather obtuse. *Flowers* crowded in a terminal panicle, nearly sessile. Exterior segments of the *calyx* ovate-lanceolate, subincised; the interior ovate and acute. *Petals* yellowish-white. *Stamens* about 25; *filaments* inserted on the margin of a 5-lobed glandular disk, which surrounds the base of the receptacle, and is adnate to the calyx; *anthers* subpeltate, margined. *Receptacle* ovate, oblong, somewhat villous. *Acines* smooth and even.

J. L.



JUSTICIA* venusta.

Beautiful Justicia.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. ACANTHACEÆ *Juss.* (*Introduction to the natural system of Botany, p.* 233.)
JUSTICIA.—Suprà, vol. 4. *fol.* 309.

J. *venusta;* fruticosa, foliis ovatis acuminatis crenatis per petiolum latè decurrentibus pubescentibus, paniculâ amplissimâ terminali longissimè pedunculatâ, floribus fasciculato-racemosis, tubulosis, faucis bilabiatæ laciniis linearibus, antheris exsertis carnosis: loculis gracillimis parallelis, capsulâ lineari polyspermâ. *Wallich plant. asiat. rarior. vol.* 1. *p.* 53. *t.* 66.

Frutex 3-4-*pedalis, erecta, parcissimè ramosa.* Caulis *digitum ferè crassus, cortice cinerascente indutus.* Rami *breves, obsoletè quadrangulares, supernè pubescentes.* Folia *opposita, approximata, decussatim patentissima, ovata, attenuato-acuminata, obsoletè crenulata, basis lateribus rotundatis, medio attenuato, et per petiolum decurrente,* 5-7-*pollicaria, membranacea, utrinque marginibusque pilis brevibus hyalinis asperula, suprà atro-viridia, obliquè rugosa, subtùs costâ gracili, elevatâ, nervis numerosis, parallelis, obliquis, interque hos venis capillaribus, transversis.* Petioli 2-3-*pollicares, sulcati, sursùm propter basin folii decurrentes latiusculè marginati.* Panicula *terminalis, lato-ovata, ramosa, patentissima, longissimè pedunculata.* Pedunculi *graciles, elongati, pallidi, sulcis duobus oppositis levibus notati, pubescentiâ copiosâ, glanduloso-capitellatâ obsiti;* universalis *semipedalis, pedalis, usque ad bipedalem;* partiales *semipedales ad pedales, ferè filiformes.* Bracteæ *infra ramificationes primarias oppositæ, foliaceæ, lineari-lanceolatæ, pollicares; reliquæ lineari-subulatæ, breves.* Flores *pulcherrimi, atro-purpurei, remotè fasciculati, subsessiles, dispositi in racemos elongatos, graciles.* Calyx *glanduloso-pilosus, parvus,* 5-*fidus;* laciniæ *lineares, acuminatæ.* Corolla *tubulosa, tripollicaris, extùs pubescens;* tubus *gracilis,* 1½-*pollicaris, basi pallidus, apice subventricoso-dilatatus;* limbus 2-*labiatus, tubo quadruplò brevior, labio superiore recto, leviterve adscendente,* 2-*fido; inferiore patente,* 3-*fido; laciniis omnibus linearibus, obtusiusculis.* Stamina 2, *supra faucem perviam puberulam parùm elevata, glabra;* filamenta *capillacea, brevissima;* antheræ *oblongæ, carnosæ, parùm divergentes, labio corollæ superiore dimidiò breviores, anticè* 2-*loculares;* loculis *angustissimis, gracillimis, æqualibus.* Capsula *gracilis, pallidè ferruginea, lævis, linearis, subtetragona, utrinque profundè sulcata, polysperma.* Semina *parva, plana, ovata, minutim rugosa.* —Wallich, l. c.

See fol. 1227.

"This is one of the loveliest species of Justicia with which I am acquainted; remarkable on account of its large and spreading inflorescence, which is lifted above the uppermost leaves by means of a long and slender common peduncle. The flowers are tubular, and of a deep-purple colour, contrasting in a very striking manner with the dark-green and large foliage. I had the satisfaction of bringing a growing plant to England in 1828, which was presented by the Honourable Court of Directors of the East India Company to the Horticultural Society of London, in whose rich garden, at Chiswick, it has lately blossomed."—*Wallich, l. c.*

From this collection the accompanying drawing was taken in September last. It flowers beautifully in the stove, and is readily propagated by cuttings.

A native of the Pundua mountains, on the eastern frontier of Bengal.

J. L.



LOPHOSPERMUM* erubescens.

Blushing Lophospermum.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARINEÆ *Jussieu.* (*Introduction to the natural system of Botany, p.* 228.)

LOPHOSPERMUM.—Calyx 5-partitus. *Corolla* campanulata: limbo 5-lobo subæquali. *Capsula* bilocularis, irregulariter dehiscens. *Semina* imbricata, membranaceo-alata. *D. Don in Linn. trans. vol.* 15. *p.* 350.

L. *erubescens;* foliis triangulari-cordatis grossè inæqualiterque serratis pubescentibus, calycis segmentis oblongis mucronulatis, filamentis simplicibus. *D. Don in the British flower-garden, t.* 75, *in notâ.*

L. scandens. *Bot. mag. tt.* 3037, 3288. *British flower-garden, t.* 68.

Caulis *basi fruticosus, teres, volubilis, glanduloso-pilosus, ramosus.* Folia *opposita, villosa, triangulari-cordata, dentata, apice integra, tactu mollia, petiolis sæpiùs cirrhi officio functis, spiraliter convolutis.* Racemi *terminales, multiflori, bracteis foliis conformibus, alternis, valdè glanduloso-hirtis.* Calyx *pentaphyllus;* sepalis *ovatis, acutis, integerrimis, pubescentibus, apice rubescentibus.* Corolla 3 *uncias longa, infundibularis, subarcuata, amœnè rosea, glanduloso-pilosa, limbo subbilabiato recto: laciniis oblongis, obtusis, subæqualibus, inferiore tantùm minore, tubo intùs villis luteis, antice bicristato, roseo guttato demùm ad basin evanescente.* Stamina *didynama, versùs basin tubi inserta, rudimento minimo quinti, filamentis pubescentibus, antherarum loculis glabris divaricatis.* Ovarium *villosum, biloculare.* Stylus *basi pubescens.* Stigma *inæqualiter bifidum.* Capsula *subrotunda, mucronata, calyce persistente inclusa, bilocularis, polysperma.* Semina *membranaceo-alata, tuberculosa, ferè ut in* Eccremocarpo scabro, *sed longè minora, et inæqualiter lobata.*

This very handsome frutescent climber is a native of Mexico, whence seeds were obtained by several individuals about the same time. It grows most luxuriantly during the summer, trained to a wall or treillage, and requires exactly the same treatment as Eccremocarpus scaber;

* So named by Mr. Don, from λόφος, a crest, and σπέρμα, a seed; because the seeds have a winged or crested margin.

namely, to be protected during winter so securely from frost, that the woody stems may be preserved, to push forth new flowering branches the succeeding year. It increases so readily by cuttings, that it will soon be very common. Our drawing was made in the Nursery of Messrs. Whitley and Co., of Fulham, in August last.

It was at first supposed to be the same as the Lophospermum scandens; but Mr. Don, having lately compared the garden plant with the original in Mr. Lambert's Herbarium, has ascertained it to be a new species.

J. L.

NOTE.

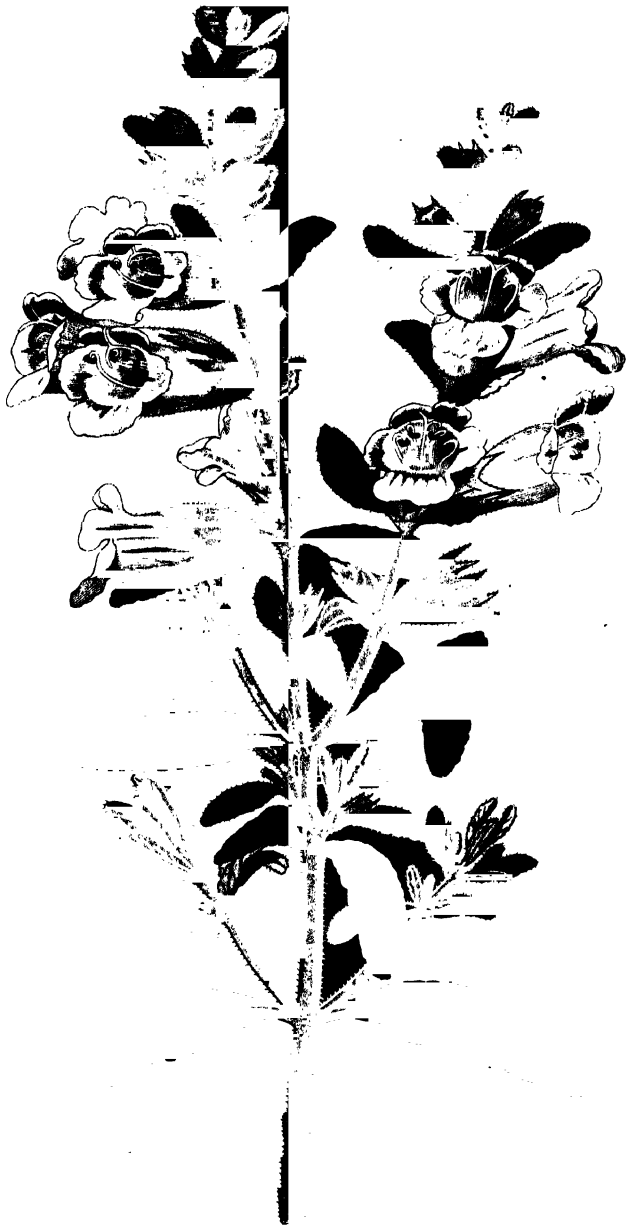
We avail ourselves of this opportunity of offering a remark or two regarding a criticism upon this and other Botanical periodical works, which has been made in the *Gardener's Magazine*, and, having been repeated more than once, seems to require some notice. It is said, that it is the practice of the editors of these works to publish the same plant one after another; so that a purchaser is obliged to pay repeatedly for the same thing. To this we should plead guilty, in common with our brethren, and promise to amend our conduct for the future, if we agreed with our critics that the public really sustained any injury. A little explanation, however, will perhaps shew, first, that so much evil does not arise from occasional repetitions of the same plant in different works, as is alleged; and secondly, that they cannot be always avoided.

Circumstances of this kind take place in various ways. Sometimes two rival publications, each eager for priority, contain the same plant on the same day, or a month earlier or later than each other. Such a case would obviously arise from mere accident, against which neither party could guard, unless the editors were mutually acquainted with each other's materials, which is not the case. At another time, they may be caused by a drawing having been made for one work before it was known that others had it in their possession. After this expense has been incurred, the proprietors have to consider whether they will suffer loss by not publishing the drawing that has been prepared, or whether they are, nevertheless, justified in letting it appear. The determination of this point always rests, we presume, with the editor, who exercises his judgment in the matter, and who, in fact, does cancel a considerable number of drawings. We remember hearing the late venerable editor of the *Botanical Magazine* complain of the large number of losses of this sort his work had

sustained; and the proprietors of the *Botanical Register* have certainly no cause to congratulate themselves upon exemption from such. Finally, repetitions may arise from inadvertence; and then they become part of those errors to which all are liable, and which are carried to the account between the editor and the public. We have said thus much, as if the degree of public inconvenience which is assumed had been proved to exist. To do this, it must be shewn that a greater number of persons purchase all the periodical publications to which the charges in question refer, than a part,—one, for example, only. We strongly suspect that this would not only not appear upon investigation, but that exactly the reverse would prove to be the fact; namely, that by far the greater number of purchasers of one Botanical periodical possess that alone: that such is the case to a great extent, we certainly know. Now, in the latter point of view, what at first appeared a hardship becomes a positive advantage; and hesitation on the part of A to publish that which the work of B previously contained, would be an injustice to the subscribers to A; because it would have the effect of obliging the possessors of A's work to procure B's also,—an excellent arrangement for the booksellers, but not quite so advantageous to the public.

We have been tempted to make these remarks, not because we feel that the conduct of the *Botanical Register* requires justification, but because we think that the public has a right to expect explanations upon public matters, from those who look to the public for support.

J. L.



SPHACELE* campanuláta.

Campanulate Sphacele.

DIDYNAMIA *GYMNOSPERMIA.*

Nat. ord. LABIATÆ *Jussieu.* (*Introduction to the natural system of Botany, p.* 239.)

SPHACELE Bentham.—*Calyx* campanulatus, subæqualis, 13-15-nervius, venosus, 5-dentatus, intus fauce nudâ. *Corolla* tubo exserto, fauce subinflatâ, bilabiata, labiis subæqualibus, superiori erecto bifido vel emarginato subplano, inferiori patente trifido. *Stamina* 4, sub labio superiori adscendentia. *Antheræ* biloculares, loculis linearibus divergentibus. *Stylus* apice subæqualiter bifidus. *Achenia* sicca, lævia.—*Benth. in bot. mag. fol.* 2993.

S. *campanulata;* ramis cano-pubescentibus, foliis subsessilibus oblongis basi angustatis subtùs cano-tomentosis, axillis utrinque unifloris, corollis campanulatis. *Bentham MSS.*

S. campanulata. *Bentham in bot. reg. fol.* 1289. *in textu.*

Frutex *ramis divaricatis, subteretibus, junioribus cano-tomentosis.* Folia *parva, oblonga v. oblongo-linearia, obtusa, crenata, rugosa, basi in petiolum brevem angustata; floralia calyce breviora.* Flores *subsecundi, oppositi, breviter pedicellati.* Calyx *campanulatus, glaber, venosus, dentibus subæqualibus acutis.* Corolla *campanulata, calyce vix duplò longior, glabra, pallidè cærulea, fauce valdè inflatâ, limbi lobis brevibus suberectis, labio superiore bifido, inferiore 3-fido, lobo medio emarginato.* Bentham MSS.

This shrub is a native of Chile, where it is probably far from uncommon. At what period it was first introduced to Europe, is uncertain. The plant from which our drawing was taken had been raised in the Garden of the Horticultural Society, from seeds collected by Mr. M'Rae near Valparaiso, in 1825; but we have in our possession a cultivated specimen, from the herbarium of the late Mr. James Down, of Cambridge, which marks its presence in England at least twenty years ago.

* Σφάκος, or σφάκελος, literally gangrene, or mortification, is a name that was sometimes given by the Greeks to the Sage, apparently because of the galls, or tumours, so common upon the species best known to them, S. pomifera. This species is still called φασκομηλία in modern Greek; a seeming corruption of

It is a neat, rather handsome species when in flower. It is too tender to be left all winter without protection, but grows freely out of doors in the summer, flowering in July and August. Propagated by cuttings.

A shrub with divaricate, nearly taper, branches, which, when young, are hoary and downy. *Leaves* small, oblong or oblong-linear, obtuse, crenated, rugose, tapering at the base to a short petiole; the floral ones shorter than the calyx. *Flowers* somewhat secund, opposite, on short pedicels. *Calyx* campanulate, smooth, veiny, with nearly equal acute teeth. *Corolla* campanulate, scarcely twice as long as the calyx, smooth, pale blue, the throat very much inflated, the lobes of the limb short, nearly erect, the upper lip bifid, the lower trifid, with the middle lobe emarginate.

J. L.



GREVILLÉA* concinna.

Neat Grevillea.

TETRANDRIA *MONOGYNIA.*

Nat. ord. PROTEACEÆ *Jussieu.—(Introduction to the natural system of Botany, p.* 68.)
GREVILLEA.—Suprà, vol. 6. *fol.* 443.

G. *concinna;* foliis linearibus indivisis (fruticis juvenilis passim trifidis pinnatifidisve) margine revolutis: adultis super glabratis; subter ramisque sericeis pilis appressis, racemis recurvis secundis multifloris, stylis glaberrimis perianthio sericeo duplò longioribus, stigmate dilatato planiusculo obliquo. *R. Brown suppl. prim. prodr. Fl. Nov. Holl. p.* 18.
G. concinna. *R. Brown prodr.* 1. *p.* 377. *Sweet Flora australasica, t.* 7.
Frutex, *ramis cinereo-tomentosis, parùm angulatis.* Folia *linearia, margine revoluta, mucronulata, sæpiùs indivisa, nunc apice bifida v. trifida, (in plantâ juniore* 3-5-*partita), suprà primùm villosa, subinde pilis rarìs obsita, demùm glabra, subtùs densè pilosa.* Racemi *pedunculati, tomentosi, secundi, recurvi.* Calyces *rosei, extùs sericei, intùs impubes.* Glandula hypogyna *pateriformis.* Ovarium *villosum;* stylus *glaber, apicalis, calyce triplò re.*

A native of the neighbourhood of Lucky Bay, on the south-western coast of New Holland, and of Lewin's Land, growing in barren places. It has been some years introduced to this country, and is now occasionally observed in collections of greenhouse plants. It is not particularly distinguished for its beauty. Our drawing was made in Mr. Colvill's Nursery, in May last.

This plant varies very much in the degree of division of its foliage, the leaves being on the old branches either entirely or very nearly undivided, and on the young plant pinnatifid; a difference so striking, that a person unac-

See fol. 1319.

quainted with the circumstance would scarcely believe specimens in these two states to belong to the same species. The figure above quoted in the *Flora Australasica*, and the accompanying plate, represent these two extremes.

A *shrub*, with hoary branches, very slightly angular. *Leaves* linear, revolute at the edge, with a small mucro, generally undivided, sometimes bifid or trifid at the point; on the upper side villous at first, afterwards clothed with scattered hairs, and finally quite smooth; on the under side clothed with dense hairs. *Racemes* pedunculate, downy, one-sided, recurved. *Calyces* rose-coloured, silky externally, destitute of down internally. The *hypogynous gland* pateriform. *Ovarium* villous; *style* smooth, arising from the end of it, three times as long as the calyx.

J. L.


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BROWALLIA* grandiflóra,

Large-flowered Browallia.

DIDYNAMIA *GYMNOSPERMIA.*

Nat. ord. SOLANEÆ *Jussieu.* (*Introduction to the natural system of Botany, p.* 231.)

BROWALLIA L.—*Calyx* tubulosus quinquefidus. *Corolla* hypocrateriformis; tubo calycem multò superante apice inflato; limbo plano quinquepartito subæquali: laciniâ superiore (?) paulò majore. *Stamina* 4, didynama, inclusa. *Stigma* subquadrilobum. *Capsula* bilocularis bivalvis: valvis apice bifidis: dissepimento valvis parallelo demùm libero: placentis adnatis. —— Herbæ *alternifoliæ, erectæ.* Flores *axillares, aut terminales, cærulei, violacei, rariùs albi.*—Kunth synops. 2. 129.

B. *grandiflora;* caule diffuso ramoso, foliis (cordatis) ovatis acutis, pedunculis axillaribus unifloris v. in racemis terminalibus dispositis, ramulis calycibusque adultis glabris.—*Graham in Jamieson's journal, Dec.* 1830.

Annua. Caules *diffusi, teretes, ramosi.* Folia *alterna, brevè petiolata, cordata, ovata, obscuro-viridia.* Racemi *secundi, terminales, pauciflori, pedunculis ebracteatis, pubescentibus.* Calyx *oblongus, 5-plicatus, 5-dentatus, pallidus, dentibus et costis atroviridibus.* Corolla *calyce duplò longior, tubo graciliformi luteo-purpureo apice ampliato, limbo plicato 5-lobo, subæquali, paululùm obliquo: laciniis emarginatis, primùm pallidè cæruleo, mox albo, fauce luteâ.* Stamina *didynama, superiora arcuata faucem corollæ claudentia: filamentis latis, planis, pubescentibus.* Antheræ *lobis subrotundis, altero sæpiùs deficiente.* Discus *magnus, carnosus, cyathiformis, ovarii dimidiam attingens.* Ovarium *biloculare,* placentâ *centrali, carnosâ, polyspermâ.* Stylus *filiformis, corrugatus.* Stigma *quadratum, dilatatum, subcucullatum, suprà foveolis duabus altis impressum.*

A beautiful little plant, apparently annual, and perhaps to be preserved by cuttings; at least this is to be hoped, as it has not yet yielded seed in this country. It is a native of Yazo, in Peru, where it was discovered by

* "Named by Linnæus in honour of John Browallius, Bishop of Abo, who defended the sexual system against Siegesbeck, in a book entitled *Examen Epicriseos, &c., Aboæ,* 1739, 8vo."—*Loudon's Enc. of Plants, p.* 532.

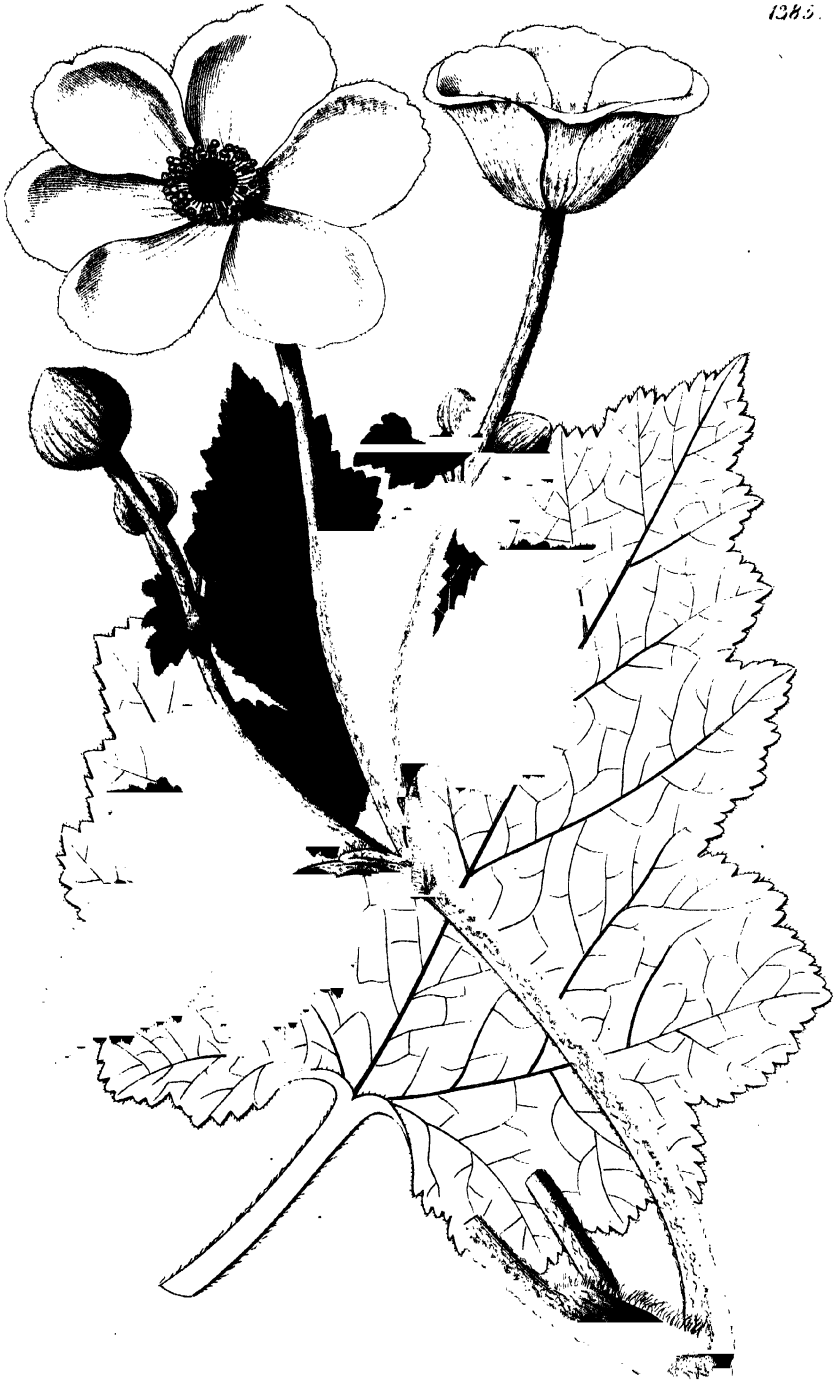
Mr. Cruckshanks, who presented seed of it to the Horticultural Society, in whose Garden it flowered from July to November last. The plants of it that were placed in the open ground suffered so much from the constant rain and gloom, that they scarcely opened their flowers; but the individuals in the greenhouse were covered with a constant succession of blossoms, producing a very pleasing effect by their changeable hues, varying from pale pure blue to white, with a deep yellow eye.

Most Botanists refer Browallia to Scrophularineæ; an error which Mr. Don has corrected in Jamieson's Journal, without, however, noticing the remarkably large disk in which the ovarium is placed. Neither does Professor Graham, in his elaborate description of the species, advert to this point of structure, which is, nevertheless, very remarkable. We agree entirely with Dr. Graham in the fact that there is a frequent tendency to the abortion of one of the cells of the uppermost anthers; such was the case in a great many flowers that we examined.

The following explanations will render the analysis of the flower in the accompanying figure more intelligible:—

1. Is a view of the upper part of the tube of the corolla, the limb of which has been cut away; it shews the position of the stamens. 2. Is one of the upper stamens, with one cell of the anther imperfect. 3. Represents one of the lower stamens; in this the filament is much more slender than in the other. 4. Represents the style and great dilated stigma. 5. Is a view of the ovarium, seated in its cup-shaped disk. 6. Is a view of a transverse section of the ovarium, shewing the ovules and their placentation.

J. L.



*A*NEMÓNE* vitifólia.

Vine-leaved Anemone.

POLYANDRIA *POLYGYNIA.*

Nat. ord. RANUNCULACEÆ *Juss.* (*Introduction to the natural system of Botany, p.* 6.)
ANEMONE.—Suprà, vol. 3. *fol.* 200.

A. *vitifolia;* foliis rotundato-cordatis, 5-7-lobis, subtùs cauleque adpressè lanuginosis, radicalibus longè petiolatis; involucellis subsessilibus trifidis; sepalis ovalibus extùs sericeis; pistillis supernè glabris; caryopsidibus pedicellatis, muticis, densissimè lanuginosis.—*Wall. MSS.*

A. vitifolia. *Buchanan apud Decand. syst. nat.* 1. *p.* 211. *Ejusd. prodr.* 1. *p.* 21.

Herba *erecta, parcè ramosa,* 2-3-*pedalis, basi suffruticosa, dum junior lanugine candidâ, adpressâ densè vestita, ætate glabrior.* Radix *perpendicularis, subfusiformis, ferè lignosa, fibrillosa, vestigiis frequentibus aridis basium petiolorum squamata.* Caulis *sæpiùs unicus, nunc duo tresve, teres, bis terve subdichotomè divisus, basi pennam cygneam, quin digitum minimum crassus, supernè attenuatus, ramique erecti, elongati, graciles, nudi, villis longis, adpressis, subdeciduis obsiti.* Folia *radicalia plura, erecta, longè petiolata, palmaria, circumscriptione orbiculato-cordata,* 5-7-*loba, lobis inæqualibus, acutis, nunc obtusis, inciso- et cuspidato-denticulatis, basis magnis rotundatis, conniventibus, suprà nitida, ferè glabra, saturatè viridia, parùm bullata, subtùs niveo-tomentosa, vel lanuginosa, multinervia, grossè et prominenter reticulato-venosa; caulina infrà divisuras subverticillata, involucriformia, patentia, brevè petiolata, vel subsessilia, inæqualia,* 5-*pollicaria,* 3-5-*loba, lobis ovatis, subacuminatis.* Petioli *canaliculati, basi dilatatâ amplexantes; radicales graciles, pedales, sesquipedalesve.* Pedunculi *terminales, teretes, erecti, cylindrici, villosi, sæpiùs tres, aliquandò plures, quorum medii trifidi, medio involucellati, triflori, reliqui uniflori,* 3-5-*pollicares, fructiferi longiores.* Involucellum *constans foliolis pollicaribus, subsessilibus, trifidis, serratis.* Flores *magni, patentissimi, diametro ferè* 2-*pollicari, ex albo dilutissimè flavescentes, extùs sericeo-villosi, pallidè violacei.* Alabastra *globosa, valdè sericea.* Sepala *sex, interdùm octo, ovalia, obtusa, ferè pollicaria, patentissima, subæqualia, bases interiorum leviter*

* Anemone, or ἀνεμώνη, literally signifies wind-flower, from ἄνεμος, wind. Its origin, they say, was from the tears of Venus; Αἵμα ῥόδον τίκτει, τὰ δὲ δάκρυα τὰν ἀνεμώναν; (from her blood sprung the Rose; from her tears the Anemone.) The plant of the ancients was the modern Anemone coronaria.

contractæ. Stamina *numerosa, glabra, brevissima, patenti-adscendentia.* Pistilla *copiosissima, acuta, supernè glabra, villosa.* Caryopsides *minutæ, compressæ, capillaceo-pedicellatæ, muticæ, lanuginè longâ, niveâ obtectæ globumque formentes album magnitudinis cerasi.*—Wallich.

" This is one of the commonest, as well as most ornamental flower-plants in Nipal, where it grows in all the forests of the great valley and the surrounding mountains, delighting in the most shady, retired, and moist situations, in the vicinity of rills and torrents. It has also been found in Kamoon, in similar places, by Robert Blinkworth, one of the collectors for the Honourable Company's Botanic Garden, at Calcutta. It blossoms in the months of August and September, and ripens its fruit soon after. I have never been able to induce it to grow large, much less to flower, in the Calcutta Garden; a circumstance by no means to be wondered at, considering the high elevations of which it is a native, and the extreme difficulties which we have in Lower India in reducing the temperature of the air. Indeed, the plant is altogether extra-tropical; and my people brought it to me from towards Gossain-Than, in the Himalaya. I had the satisfaction to see this charming plant in flower at Montreal, in Kent, the seat of the Earl Amherst, whither it had been brought from India by the Countess Amherst, whose indefatigable and successful exertions in her favourite pursuit of Horticulture and Botany, are as far beyond my feeble praise, as they exceed any other instance I have ever witnessed."

For the foregoing remarks we are indebted to Dr. Wallich; for the specimen from which our drawing was made, we have to express our acknowledgments to the Countess Amherst.

J. L.



CÚPHEA* Llávea.

Mexican Two-petalled Cuphea.

DODECANDRIA *MONOGYNIA.*

Nat. ord. SALICARIÆ *Juss.* (*Introduction to the natural system of Botany, p.* 59.)
CUPHEA.—Suprà, vol. 3. *fol.* 182.

§ 2. LONGIFLORÆ, *caulibus herbaceis aut vix suffruticosis, floribus alaribus ferè racemoso-spicatis, calycibus longè tubulosis basi ferè calcaratis nec tantùm gibbosis, petalis minutis aut nullis.*—Dec. prodr. 3. 84.

C. *Llavea;* caulibus plurimis hispidulis, ramis ascendentibus, foliis subsessilibus ovato-lanceolatis strigosis, pedicellis interfoliaceis erectis, petalis 2 obovatis magnis, cæteris abortivis, staminibus 11.—*Dec. l. c. p.* 85, *no.* 13.

C. Llavea. *La Llave et Lexarsa novorum vegetabilium descriptiones fasc.* 1. *p.* 20.

Herbacea, *perennis;* caules *plurimi, erecti, teretes, tactu scabriusculi, sesquipedales.* Folia *opposita, ovato-lanceolata, integerrima, utrinque acuminata, scabra.* Racemi *breves, pauciflorœ, interpetiolares, erectæ.* Calyx *villosus, viridis, basi gibbosus, apice obliquus, purpureus,* 6-*dentatus, inflatus.* Petala *duo oblonga, atropurpurea, undulata, unguiculata;* 4 *minima nunc deficientia.* Stamina *sæpiùs undena, nunc duodena, filamentis pilosis, longioribus exsertis.*

A native of the mountains of central Mexico, in the neighbourhood of Valladolid, the capital of the province of Mechoacan, where it was originally discovered by La Llave, flowering in March and April. It was introduced to this country by Mr. Ackermann, who presented its seeds to Mr. Tate, in whose Nursery it flowered in August last. It is a herbaceous plant, scarcely hardy enough to bear

* So named from κυφος, curved, or swelled; in allusion to tuberance at the base of the calyx.

our winters, but requiring nothing more than the protection of a frame in winter. It is more interesting than beautiful.

The petals of the Garden plant are darker-coloured than they are described by its original discoverer, who calls them *dilutè* coccinea.

Stems numerous, erect, taper, rough to the touch, a foot and a half high. *Leaves* opposite, ovate-lanceolate, quite entire, tapering to both ends, scabrous. *Racemes* short, few-flowered, from between the petioles, erect. *Calyx* villous, green, gibbous at the base, oblique at the apex, and purple, 6-toothed, and inflated. Two *petals* oblong, deep purple, wavy, unguiculate; four others very small, sometimes wanting. *Stamens* often 11, sometimes 12, with hairy filaments, the longest of which are exserted.

J. L.



POTENTILLA* Hopwoodiána.

Hopwood's Hybrid Cinquefoil.

ICOSANDRIA *POLYGYNIA.*

Nat. ord. Rosaceæ *Jussieu.* (*Introduction to the natural system of Botany, p.* 81.)
POTENTILLA.—Suprà, vol. 16. *fol.* 1379.

Garden Variety.

This plant is said to have been raised between P. napalensis and P. recta. Considering how little dependence is to be placed upon the names of species in many Gardens, we by no means vouch for the latter parentage; the former is, we believe, undoubted. It appeared to us, from specimens communicated by the Comte de Vandes, to be a very pretty plant; on which account we have given it a place in this work.

In publishing this we deviate from our usual practice, in neither ascribing to it a specific character, by which it may stand recorded in the works of systematic Botanists, nor even referring it to the station it should occupy in a classification of species. Upon this subject it is necessary that some explanation should be given.

It has long been apparent to us, that numerous varieties which the industry and skill of modern Gardeners have been, it may almost be said, creating by the intermixture of the pollen of nearly allied species, while they have, in many cases, added greatly to the beauty of the Flower-Garden, have been gradually tending, in a most inconvenient degree, to embarrass the systematic Botanist.

So long as cases of this kind were few in number, the

* See fol. 1379.

inconvenience was overlooked, and the varieties themselves neglected in works of science. By degrees, however, the repeated production of hybrid plants by artificial means caused attention to be paid to them; and, while some naturalists adopted the ingenious proposition of Mr. Herbert, in the *Horticultural Transactions*, to designate them by names as compound as their own nature, others, as M. Decandolle, unscrupulously admitted them as legitimate species into enumerations of the natural productions of the globe. The latter, however, was soon found out to be inconvenient in the highest degree, loading works of science with the records of forms so fleeting that they had, in some cases, passed away before the book that recorded them had issued from the press; and in more permanent cases, breaking down the distinctions of natural species for the sake of plants, in the creation of which wild nature had no more share than in that of the mule itself, or of the various races of domestic dogs or fowls.

No doubt from a feeling of the absurdity of thus confounding Horticulture with pure Natural History, Mr. Loudon, in his *Encyclopædia of Plants*, rejected, in the case of the Rose and the Pelargonium, all artificially created forms from the domain of science, placing them apart, under the name of Garden Varieties; a plan extremely well adapted to distinguishing between the limits of Horticulture and Botany, and answering every purpose that the student of the one can require, without interfering with the arrangements of the investigators of naturally created beings. To this plan we propose to adhere with the commencement of a new volume. We have always been anxious to figure remarkable varieties of handsome plants, and we mean to continue the practice; but, instead of referring them with doubt and difficulty to Natural species, we propose henceforth to designate them, like this one, by the particular title of Garden Variety, in order that the compilers of Species Plantarum may no longer be led into incorporating such ephemeral productions with their lists of the genuine productions of nature.

J. L.



*LÁTHYRUS** tingitánus

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ *Juss.* (*Introduction to the natural system of Botany, p.* 86.)
LATHYRUS.—Suprà, vol. 14. *fol.* 11

§ 2. Annui; *pedunculis* 1-3-*floris.*
** *Foliis unijugis.*

L. *tingitanus*; glaberrimus, caulibus diffusis alatis, foliolis ovatis obtusis mucronulatis, stipulis semi-sagittato-ovatis petiolo multò brevioribus, pedunculis bifloris tubo longioribus, dentibus calycinis subæqualibus tubo brevioribus, leguminibus longo-linearibus leviter reticulatis compressis torulosis, suturis tetragonis (seminibus subquadratis fusco-nebulosis). —*Decand. Prodr.* 2. 374.

L. tingitanus. *Linn. sp. pl.* 1032. *Desf. atl.* 2. 160. *Willd. sp. pl.* 3. 1084. *Curt. bot. mag.* 100.

L. tingitanus [illegible] orobi, flore amplo ruberrimo.—*Moris hist.* 2. *p.* 55.

While we are every where ransacking nature for new objects of cultivation, and searching in the most remote corners of the globe for flowers and fruits to delight our senses, we are too apt to neglect the old inhabitants of our Gardens, which are at least as beautiful as the new comers. How seldom we now see the Helleborus niger, the Rose of Christmas; in how little estimation are held the old varieties of Crocus, Fritillaria, and Colchicum; and even the rich varieties of Tagetes are fast fading from remembrance. This should not be so; our Gardens are capacious enough, and our tastes sufficiently varied, to render every really handsome plant worth preservation: and when we see an old discarded favourite make its appearance after a short

* Nothing certain is known of the origin of this word. The λάθυρος of Theophrastus appears to have been Lathyrus sativus.

retreat, we hail it with more delight than the most gaudy flowers of fashion of the day. Such a one is the Tangier Pea, hardy in constitution, beautiful in form, rich in colour, admirably adapted for every purpose to which a climbing plant is useful, an inhabitant of our Gardens a hundred and fifty years ago, but never now to be seen. For this reason we reproduce it, from a specimen growing in the Garden of the Horticultural Society in 1830, where its natural hardihood of character enabled it to brave in security a season that was fatal to many of the beauties of India, Mexico, and North-western America.

A native of Barbary. J. L.



ROSA Ruga.

The Ruga Rose.

ICOSANDR

Nat. ord. ROSACEÆ *Jussieu.* (*Introduction to the natural system of Botany, p.* 31.)
ROSA.—Suprà. vol. 1. *fol.* 53.

VARIETY.

This beautiful variety is said to have been raised between R. arvensis and the Sweet-scented Chinese Rose. It was sent from Italy to the Horticultural Society by Mr. Clare. As a Garden plant, it is one of the most valuable that we are acquainted with; it produces the long straggling shoots of R. arvensis, which are, however, without the debility of that species, having gained all the vigour of the Chinese parent. They will sometimes grow 10 or 12 feet in a year, and are therefore particularly well adapted to scrambling over old pales, or to covering any other place in which a wildness of appearance is desirable. The leaves are a little stained with dull purple, a colour deeply fixed in the stem, and are as nearly as possible intermediate in form and texture between R. indica and arvensis, but are scarcely evergreen. The blossoms grow in bunches, are of the size of the Sweet-scented Chinese Rose, and fully as fragrant; in colour they are rather deeper, especially before being fully expanded, when they approach the tint of the charming variety known in the Gardens under the name of the Double Hip. Very readily increased by cuttings.

J. L.

LOASA* ambrosiæfolia.

Ambrosia-leaved Loasa.

POLYADELPHIA *POLYANDRIA*, OR POLYANDRIA *MONOGYNIA*.

Nat. ord. LOASEÆ *Jussieu.*—(*Introduction to the natural system of Botany, p.* 58.)
LOASA.—*Suprà, vol.* 8. *fol.* 667.

L. *ambrosiæfolia;* foliis alternis petiolatis bipinnatifidis, lobis lobulisque subobtusis, pedicellis extra-axillaribus, lobis calycis lanceolato-linearibus acutis petalis brevioribus.—*Decand. prodr.* 3. 342.
L. ambrosiæfolia. *Juss. in ann. mus.* 5. *t.* 4. *fol.* 1.
L. hispida. *Graham in Jamieson's journal, Oct.* 1830, *p.* 369.

Annua. Caulis *erectus, rigidus, teres, pallidè viridis, ramosus, undique pilis rigidis urentibus, subdeflexis, fusois vestitus.* Folia *alterna, bipinnatifida, hispida, lobis planis, valdè inæqualibus, obtusis, nunc dentatis.* Pedicelli *hispidi, extra-axillares, versùs fastigium caulis provenientes; unciam et dimidiam longi.* Flores *nutantes, flavi, diametro ferè* 2-*unciali.* Ovarium *uniloculare, hispidissimum, turbinatum.* Sepala *reflexa, ovata, obtusa, pubescentia.* Petala *reflexa, unguiculata, cuculiata, sagittata, pubescentia, sepalis multùm longiora.* Squamæ *exteriores inflatæ, valdè gibbosæ, obcordatæ, fauce planæ; intra hos adsunt squamulæ decem subulatæ, pubescentes, per paria squamis opposita, stamina sterilia simulantes.* Stamina *indefinita, inæqualia, intrà cavitates petalorum recondita.* Stylus *teres, pilosus; stigmata simplicia;* ovula *placentis tribus parietalibus affixa.* Semina *parva, oblonga, brunnea, minutè undique tuberculata,* testâ *molli,* nucleo *oblongo,* embryone *in axi albuminis carnosi,* arillo *nullo.*

For the introduction of this very beautiful new annual we are indebted to Mr. Cruckshanks, who gathered it near Lima. From seeds presented by this gentleman to the Horticultural Society the plant was raised from which our figure was taken. It was placed on the south side of a yew hedge in the Garden of the Society, where it grew vigorously, attaining a height of about 2½ feet, flowering

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* A word of unknown derivation.

from July to September, and producing seed freely. It perished at the first approach of frost.

It is with much regret that we find ourselves obliged to differ from our valued friend Professor Graham, in the name to be assigned to this species. It may be very true that it is the L. hispida of Linnæus, although it would seem, from M. Decandolle's *Prodromus*, that that plant is at least a well-marked variety of this; but, admitting it to be the L. hispida itself, it appears to us that, however sacred the law of priority of names may be, yet this is one of those cases in which it is not only justifiable, but even necessary to depart from it. Linnæus knew but one Loasa, and he naturally enough called it hispida; but surely when twenty species have been discovered, all hispid, many as much so as the original, and some more so, it is better to adopt the name proposed by the first Botanist that described the genus with any sort of accuracy, rather than that of a naturalist whose appellation would never have been applied had he known but a little more of the genus. The Swedish Botanist himself made no scruple of treating his predecessors or even contemporaries thus; and we submit, with great deference to those who hold a contrary opinion, that there is no such magic in the name of Linnæus, at the present day, as to exempt his nomenclature from a similar castigation. L. ambrosiæfolia itself is not perhaps the very best name that could have been contrived, but it involves no absurdity.

It might also perhaps be urged, not without reason, that more inconvenience would be now found in reverting to the forgotten name of Linnæus than in adhering to the more recent one of Jussieu, which has been generally adopted by succeeding Botanists.

J. L.



SEDUM* Cepæa.

Panicled Stonecrop.



DECANDRIA *PENTAGYNIA.*

Nat. ord. CRASSULACEÆ *Juss.* (*Introduction to the natural system of Botany, p.* 161.)
SEDUM.—Suprà, vol. 2. *fol.* 142.

** *Planifolia, floribus albis, rubris, aut cæruleis.* Dec. prodr. 3. 402.

S. *Cepæa;* caule herbaceo terete pubescente, foliis planis integerrimis, infimis subspatulatis, superioribus oblongis linearibusve, floribus paniculatis, petalis in acumen aristatum desinentibus.—*Dec. l. c.* 404.
S. Cepæa. *Linn. species pl.* 617.
S. paniculatum. *Lamarck* sec. *Decand.*
S. galioides. *Allioni ped. t.* 65. *f.* 3.
S. spatulatum. *Waldst. et Kitaib.* 2. *p.* 108. *t.* 104.
S. tetraphyllum. *Smith prodr. fl. Græc.* 1. 309.
S. alsinefolium. *Allioni ped. t.* 22. *f.* 2.
} Varr. *sec.* Decandollium.
Anacampseros Cepæa. *Haworth.*

A very common plant in the south of Europe, where it assumes different appearances according to the situations in which it grows; from these the several erroneous species above noticed, after Decandolle, have been formed. Under its common appearance it is found every where upon stones, rocks, and walls, on all the northern coast of the basin of the Mediterranean. It appears under the form of S. alsinefolium in shady places in Piedmont, on the mountains of Roaschia and elsewhere; as S. galioides in Piedmont and Corsica; as S. spatulatum in the south of Hungary; and as S. tetraphyllum in hot places in the Morea. It is particularly variable in the degree of length

* Said to have been so named *à semper sedendo*, because it is always seated, as it were, upon stones, &c. This Cepæa is the κηπαῖα of the Greeks, according to some.

of its leaves, and in their situation upon the stem. Mr. Bentham has remarked, in his *Critical Catalogue of the Plants of the Pyrenees*, that the upper leaves are almost always verticillate, and that very often they are all so.

We are chiefly induced to give a figure of this species from no representation of it having yet found its way into any English work.

It is an annual, and very well adapted to ornamenting rock-work: it also grows well in the common border. Our drawing was made in the Garden of the Horticultural Society, where it had been received from a continental Botanic Garden, under the erroneous name of S. Guettardi.

J. L.

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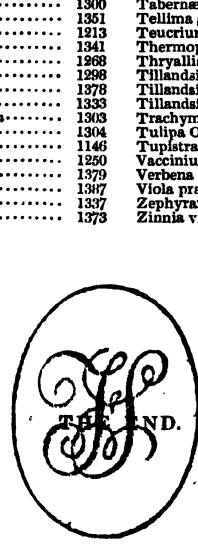
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Cytisus multiflorus	1191
Daphne hybrida	1177
Delphinium Menziesii	1192
Dendrobium anceps	1239
Dendrobium longicornu	1315
Dendrobium moniliforme	1314
Dendrobium chrysanthum	1299
Dendrobium secundum	1291
Digitalis laciniata	1201
Diospyrus Mabola	1139
Dracæna surculosa	1169
Drimia villosa	1346
Echeveria gibbiflora	1247
Elæagnus angustifolia	1156
Eriophyllum cæspitosum	1167
Erythrina carnea	1327
Erythrina poiianthes	1246
Eschscholtzia californica	1168
Eulophia ensata	1147
Eutoca multiflora	1180
Fuchsia microphylla	1269
Fuchsia thymifolia	1284
Gaillardia aristata	1186
Genista procumbens	1150
Gesneria macrostachya	1202
Gesneria rutila	1158
Gesneria rutila, var. *atrosanguinea*	1279
Geum chilense, var. *grandiflorum*	1348
Gilia capitata	1170
Grevillea concinna	1383
Grevillea punicea	1319
Habranthus Andersoni	1345
Hamelia ventricosa	1198
Haylockia pusilla	1371
Hedychium coccineum	1209
Helianthus lenticularis	1265
Heuchera micrantha	1302
Hosackia bicolor	1257
Hosta cærulea	1204
Ipomopsis elegans	1281
Iris tenax	1218
Isopogon formosus	1288
Jasminum acuminatum	1296
Justicia picta	1227
Justicia venusta	1380
Justicia guttata	1334
Justicia quadrangularis	1340
Kæmpferia Roscoeana	1212
Kennedya monophylla, var. *longiracemosa*	1336
Lachenalia pallida	1350
Lathyrus californicus	1144
Lathyrus tingitanus	1388
Lepechinia spicata	1292
Leucocoryne odorata	1293
Linum sibiricum, var. *Lewisii*	1163
Linum mexicanum	1326
Liparis alata	1175
Lissanthe sapida	1275
Loasa ambrosiæfolia	1390
Lobelia longiflora	1200
Lobelia purpurea	1325
Lonicera involucrata	1179

	Folium
Lophanthus anisatus	1282
Lophospermum erubescens	1381
Lowea berberifolia	1261
Lupinus arbustus	1230
Lupinus aridus	1242
Lupinus laxiflorus	1140
Lupinus lepidus	1149
Lupinus littoralis	1198
Lupinus micranthus	1251
Lupinus ornatus	1216
Lupinus plumosus	1217
Lupinus polyphyllus, var. *albiflorus*	1377
Magnolia Yulan, var. *Soulangiana*	1164
Malva purpurata	1362
Malva Munroana	1306
Mammillaria pulcra	1329
Maxillaria ciliaris	1206
Microstylis ophioglossoides	1290
Mimulus propinquus	1330
Œnothera decumbens	1221
Œnothera pallida	1142
Œnothera viminea	1220
Ophrys araneifera, var. *limbata*	1197
Orchis papilionacea	1155
Oxalis tortuosa	1249
Pachypodium tuberosum	1321
Palavia rhombifolia	1275
Pæonia hybrida	1208
Passiflora ligularis	
acuminatum	1285
Pentstemon attenuatum	1295
Pentstemon confertum	1260
Pentstemon deustum	1318
Pentstemon diffusum	1132
Pentstemon glandulosum	1262
Pentstemon glaucum	1286
Pentstemon pruinosum	1280
Pentstemon pulchellum	1138
Pentstemon Scouleri	1277
Pentstemon speciosum	1270
Pentstemon triphyllum	1245
Pentstemon venustum	1309
Persea gratissima	1288
Phlomis floccosa	1300
Phlox speciosa	1351
Pholidota imbricata	1213
Phycella Herbertiana	1341
Pimelea humilis	1268
Pleurothallis prolifera	1298
Plumeria Lambertiana	1378
Podolobium trilobatum	1333
Polemonium cæruleum, var. *pilíferum*	1303
Polemonium humile	1304
Polygala oppositifolia, var. *major*	1146
Polygonum injucundum	1250
Potentilla arguta	1379
Potentilla Hopwoodiana	1347
Pothos scandens	1337
Pratia begonifolia	1373

	Folium
Prunus candicans	1135
Prunus dasycarpa	1243
Pyrus angustifolia	1207
Pyrus grandifolia	1154
Pyrus sinensis	1248
Pyrus spuria	1196
Reevesia thyrsoidea	1236
Renanthera coccinea	1131
Rhododendron arboreum, var. *roseum*	1240
Ribes cereum	1263
Ribes punctatum	1278
Ribes divaricatum	1359
Ribes sanguineum	1349
Ribes setosum	1237
Ribes tenuiflorum	1274
Rosa multiflora, var. *platyphylla*	1372
Rosa Ruga	1389
Rubus nutkanus	1368
Ruellia Sabiniana	1238
Sagittaria angustifolia	1141
Salvia involucrata	1205
Salvia fulgens	1356
Salvia Grahami	1370
Scilla plumbea	1355
Scottia angustifolia	1266
Scottia dentata	1233
Sedum Cepæa	1391
Senecio lilacinus	1342
Serapias cordigera, var. *longipetala*	1189
Sinningia villosa	1134
Sisyrinchium grandiflorum	1264
Sisyrinchium odoratissimum	1283
Sophora velutina	1185
Sparaxis pendula	1360
Spermadictyon azureum	1235
Sphacele campanulata	1382
Spiræa ariefolia	1365
Spiræa chamædrifolia	1222
Stachys germanica, var. *pubescens*	1289
Stachys Salviæ	1226
Sterculia lanceolata	1256
Sterculia Tragacantha	1353
Streptocarpus Rexii	1173
Tabernæmontana densiflora	1273
Tellima grandiflora	1178
Teucrium orchideum	1255
Thermopsis fabacea	1272
Thryallis brachystachys	1162
Tillandsia acaulis	1157
Tillandsia stricta	1338
Tillandsia rosea	1357
Trachymene cærulea	1225
Tulipa Oculus solis, var. *Persica*	1143
Tupistra nutans	1223
Vaccinium ovatum	1354
Verbena Melindres	1184
Viola præmorsa	1254
Zephyranthes mesochloa	1361
Zinnia violacea, var. *coccinea*	1294



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